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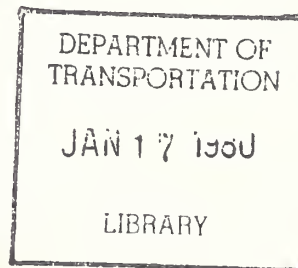
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AUTOMOTIVE MANUFACTURING ASSESSMENT SYSTEM  
VOLUME II: PRODUCT SCHEDULES OF ENGINE/DRIVETRAIN  
COMBINATIONS

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FINAL REPORT



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16. Abstract Volume II, Product Schedules Of Engine/Driveline Combinations, is part of a four volume set documenting areas of research resulting from the development of the Automotive Manufacturing Assessment System (AMAS) for the DOT/Transportation Systems Center. AMAS was designed to assist in the evaluation of industry's capability to produce fuel efficient vehicles. Engine/driveline changes are the second most important contribution to fuel economy (weight reduction being the first) and are of major importance towards meeting emission standards. Through extensive synthesis of vehicle specifications and other data, chronological presentations were developed to illustrate engines and transmissions in production, engine/transmission and model/engine combinations, and automatic vs. manual transmission availability. Also shown are the progression of engine/driveline changes from 1975 through 1978; the correlation of these changes with new vehicle introductions; the restrictions on available drivetrain options due to emission requirements; and technological improvements including dieselization, fuel metering, lock-up torque converters, and front-wheel-drive. Volume I, Master Product Schedules, portrays, chronologically, current and future product changes and technological advances for each domestic auto (1975-85), light truck (1975-80), and selected import manufacturers (1975-80). Volume III, Materials-Weight Analysis, is a detailed compendium of material applications to automotive vehicles and components with emphasis on technological advances and weight reduction potential. Volume IV, Engine Manufacturing Analysis, describes a complex modern high volume engine production facility (Ford Windsor Engine Plant) and assesses the impact of year-to-year model changes and government regulatory action on the manufacturing process.					
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## PREFACE

Volume II (Product Schedules of Engine/Driveline Combinations) was prepared for the Department of Transportation, Transportation Systems Center (TSC) and presents the results of research and analysis of the available engine, transmission, and rear axle combinations for all models of each domestic auto manufacturer for the model years 1975 through 1978. The work was directed by the Transportation Industry Analysis Branch under the sponsorship of the Energy Programs Division.

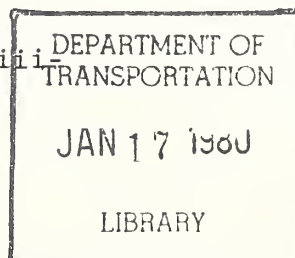
The motor vehicle manufacturers' ability to meet 1979-1985 fuel economy goals is heavily dependent upon the timeliness and degree by which they are able to reduce the size and weight of today's fleets, and incorporate more fuel efficient power plants, drivelines, safety, and emission control devices. By monitoring subtle changes in each domestic manufacturer's past and announced future engine/driveline combinations, a better understanding of the fuel economy and emission improvements is obtained. The results of this analysis are in the form of Engine/Driveline Product Schedules (Worksheets) and five different Summary Level charts which provide graphically, time phased relationships among combinations of engines, transmissions, models, and axle ratios for GM, Ford, Chrysler, and AMC.

This volume contains the results of one of four major areas investigated under the Automotive Manufacturing Assessment System (AMAS) which was designed to evaluate the capability of the automotive industry to produce fuel efficient cars and light trucks, and to assess the impact such conversions will have on producers and consumers. The other three areas are: Master Product Schedules (Volume I); Materials/Weight Analysis (Volume III); and Engine Manufacturing Analysis (Volume IV).

This volume is divided into five sections plus appendices. Section 1 describes the objectives of the analysis and presents the methodology used to develop the chronology of engine/driveline changes. Summary data and commentary for GM, Ford, Chrysler, and AMC are included in Sections 2, 3, 4 and 5 respectively. Supporting detailed information (Engine/Driveline Product Schedules) are located in the Appendices.

Corporate-Tech Planning wishes to acknowledge the guidance and assistance provided by Mr. George E. Byron, Transportation Industry Analysis Branch at TSC, who was the Technical Monitor for this program.

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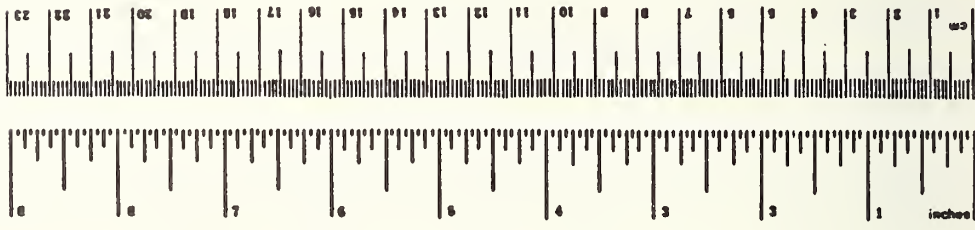
# METRIC CONVERSION FACTORS

## Approximate Conversions to Metric Measures

Symbol	What You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
<b>AREA</b>				
in <sup>2</sup>	square inches	6.5	square centimeters	cm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09	square meters	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.8	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.6	square kilometers	km <sup>2</sup>
	acres	0.4	hectares	ha
<b>MASS (weight)</b>				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
<b>VOLUME</b>				
in <sup>3</sup>	cubic inches	16.4	cubic centimeters	cc
cup	cup	6	milliliters	ml
pt	pint	16	milliliters	ml
qt	quart	946	milliliters	ml
gal	gallon	3.8	liters	l
cu ft	cubic feet	0.03	liters	l
yd <sup>3</sup>	cubic yards	0.76	cubic meters	m <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°F	Fahrenheit temperature	$(F - 32) \times \frac{5}{9}$	Celsius temperature	°C

## Approximate Conversions from Metric Measures

Symbol	What You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meter	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
<b>AREA</b>				
cm <sup>2</sup>	square centimeters	0.16	square inches	in <sup>2</sup>
m <sup>2</sup>	square meters	1.2	square yards	yd <sup>2</sup>
km <sup>2</sup>	square kilometers	0.4	square miles	mi <sup>2</sup>
ha	hectares (10,000 m <sup>2</sup> )	2.6	acres	ac
<b>MASS (weight)</b>				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	st
<b>VOLUME</b>				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m <sup>3</sup>	cubic meters	36	cubic feet	ft <sup>3</sup>
m <sup>3</sup>	cubic meters	1.3	cubic yards	yd <sup>3</sup>
L	liters	61.02	cubic inches	in <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
°C	Celsius temperature	$(C \times \frac{9}{5}) + 32$	Fahrenheit temperature	°F



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## LIST OF ABBREVIATIONS

A/C	Air Conditioner(ing)
A.I.	Automotive Industries
AMAS	Automotive Manufacturing Assessment System
AMC	American Motors Corporation
CAFE	Corporate Average Fuel Economy
CID	Cubic Inch Displacement
CTP	Corporate-Tech Planning Inc.
DOT	U. S. Department of Transportation
EFI	Electronic Fuel Injection
FI	Fuel Injection
FIOD	Ford Integral Overdrive
GM	General Motors Corporation
HO(H-O)	High Output
L(ℓ)	Liter
M	Modified
MPH(mph)	Miles Per Hour
MVMA	Motor Vehicle Manufacturers Association of the United States, Inc.
OHC	Overhead Camshaft
OHV	Overhead Valve
PROCO	Programmed Combustion
R	Reverse
THM	Turbo Hydramatic
TSC	Transportation Systems Center
V	Venturi (Carburetor Barrel)
VV	Variable Venturi
VW	Volkswagen
W	Windsor
W.A.R.	Ward's Automotive Reports
W.E.U.	Ward's Engine Update

## 1. INTRODUCTION AND SUMMARY

### 1.1 OBJECTIVES

It is widely recognized that total vehicle systems engineering optimizes the design of a new vehicle. It results in the combination of improved engines and drivetrains, suspensions, aerodynamic drag, tires, etc. and weight reduction (downsizing) while allocating a larger proportion of the available space to the passenger compartment.

This report addresses specific engine/driveline offerings of the four domestic manufacturers and provides a chronological perspective of the introduction of new engine and driveline combinations. The degree of engine changes and the extent to which they coincide with yearly model changes and downsizing plans (as shown in Volume I, Master Product Schedules) is essential to the understanding of each manufacturer's strategy to meet fuel economy and emission goals. To this end, a complete inventory of all engines and transmissions used from 1975 through 1978 by each manufacturer is detailed.

Engine/driveline changes are the second most important contribution to fuel economy (weight reduction being first) and are of major importance towards meeting emission standards. If all other factors are kept constant, lower axle ratios (or N/V) decrease fuel consumption until a minimum is reached (Figure 1-1) but at the expense of increased 0-60 mph acceleration time (decreased performance). When vehicle weight is reduced (and axle ratio is held constant), fuel consumption is also reduced and acceleration performance is improved. A lowering of axle ratio sufficient to maintain equivalent performance improves fuel economy further, above that gained by just the change in weight. A change in engine displacement (CID) results in almost the same change in fuel consumption as a change in axle ratio with the same effect on acceleration performance.

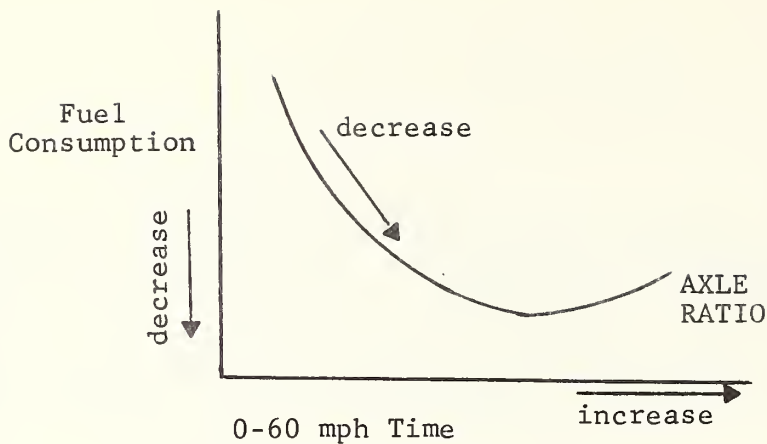


FIGURE 1-1. EFFECT ON FUEL CONSUMPTION AND PERFORMANCE OF DECREASED AXLE RATIO

As a result of the minimum fuel consumption reached with the decrease in axle ratio (Figure 1-1), it is engine size which basically determines acceleration performance for a given weight. "Axle ratio changes can be used to trade-off performance for fuel economy only over a very limited range."\* Therefore, for any given performance level and vehicle weight, there is an optimum engine size to achieve minimum fuel consumption. Moreover, at the point of optimum size fuel consumption increases only slightly with small changes in engine size. For this reason, engine sizes usually vary by 30-50 CID with fine tuning for a specific performance level or fuel economy accomplished by minor changes in the axle ratio.

The data presented offers a method of observing the pattern of matching power team combinations to vehicle offerings on a year-to-year basis by each manufacturer. It becomes evident that the more combinations a manufacturer has at his disposal, the more efficient he can systems engineer vehicles to meet emissions and fuel economy standards at a minimum cost. General Motors has a wide assortment of engines and drivetrains to choose from whereas AMC is extremely limited and Chrysler and Ford are somewhere in between.

---

\*Marks, C., and Niepoth, G., Car Design for Economy and Emissions, SAE Paper 750954 presented at Automotive Engineering and Manufacturing Meeting, Detroit, October 1975.

Having laid out the engine/drivetrain usage by year, this data can then be correlated with plant and facilities to determine which plants will be affected by changes and to what extent. An attempt was made to identify sources of the components (especially the transmissions), whenever possible, to aid in this analysis.

A complete inventory of all engine/drivetrain combinations for each domestic car produced by General Motors, Ford, Chrysler, AMC, and, where data was available, the captive imports of these manufacturers is provided for 1975 to 1978 model vehicles with some 1979 and 1980 information included as available.

This analysis also provides an overview of what technological advances each manufacturer employs in such areas as diesels, fuel metering, lock-up torque converters, and front-wheel-drive. An integrated compilation of information is provided as a research tool which assimilates the extensive data available on engines and drivetrains.

The methodology employed to compile the data is shown in Figure 1-2. A format was developed to organize that information or attributes which has the most affect on fuel economy from one model year to the next by: engine type, size and code; transmission type, forward speeds, and gear ratios; axle ratios; and models using these different combinations. Motor Vehicle Manufacturers Association (MVMA) specifications for each model for the years 1975 through 1978 were the primary data source. In some cases, inconsistencies and errors in the specification data were clarified by direct contact with the manufacturer.

The extensive data was consolidated on detailed worksheets. Called Engine/Driveline Product Schedules, they were developed for General Motors, Ford, Chrysler, and AMC and are located in Appendices A through D respectively, along with more detailed discussion in Section 1.2. From these detail level worksheets, five different summary level charts for each manufacturer were developed to illustrate the interrelationship among model year, engine, transmission, and model. These charts are explained in Section 1.3 and are found in Sections 2 through 5 along with individual descriptive text.



ENGINE - TRANSMISSION - REAR AXLE PRODUCT SCHEDULES

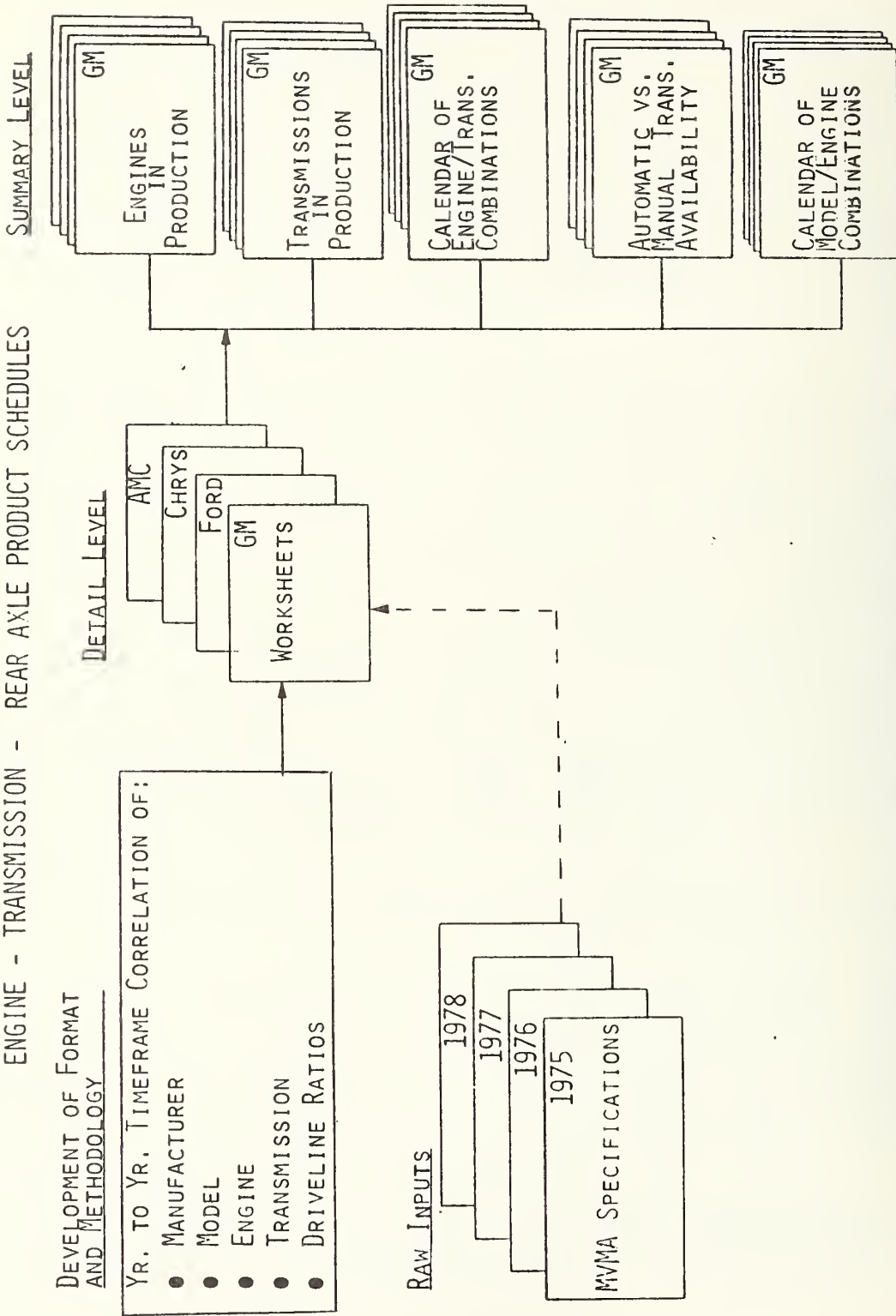


FIGURE 1-2. ENGINE/DRIVELINE SCHEDULE METHODOLOGY

## 1.2 DETAIL LEVEL WORKSHEETS

The engine-transmission-rear axle product schedule melds drive-line information from many different MVMA Specification areas into one composite presentation. Defined as detail level worksheets, a set for GM, Ford, Chrysler, and AMC are found in Appendices A through D respectively. All of the summary level figures and tables were derived from data presented in these worksheets.

Because engine changes are much less frequent, than say the year-to-year model changes, engine manufacturer and type is used as the basic data identifier for worksheet entry. Once the engine is located, the different transmissions, axles, and models used with each engine can then be determined. One or more manual or automatic transmissions may be used by each engine. New or discontinued engines are given particular note. Special engine types and applications (transverse, diesel, etc.) are identified to assist in determining ranges of applications for a given engine size. The engines are listed in the order of increasing cubic inch displacement (liters for many). Other information included: engine type (IL-4, V-6, IL-6, V-8); fuel metering (1V, 2V, 4V, FI, VV); division (GM only); and engine manufacturing code (GM only when available).

The transmissions which are used by each engine are then shown for each year 1975 through 1978. Transmissions are first broken down by type (manual or automatic) with the make or code (i.e., Chevrolet, THM 300, etc.) for each transmission prominently listed. The forward speeds and gear ratios (for all forward speeds and reverse) are then listed for each year the transmission was used by each engine. The addition of a new transmission to the inventory is signified by a bold outlining of the forward speeds and gear ratios in the year offered. A "new" transmission is defined as one of all new design or a change in gear ratios from the previous year. All manufacturers have a wide variety of rear axle ratio combinations for matching engine/transmission combinations. Changes of these ratios are relatively easy to make and, in fact, are done frequently by each manufacturer to maximize performance, fuel economy, and emissions benefits. As a result, axle ratio changes are not considered new in this analysis even if an all new rear axle is offered.

All axle ratios used with each transmission are then shown. Notation is used to identify which ratios are available for each of the different emission requirements (Federal, California, high altitude). Ratios are also shown by vehicle model so that variances between different models using the same engine and transmission combinations can be easily identified. Vehicle models which are all now (as defined in Volume I, Master Product Schedules) are identified in bold outline for the appropriate year. With this system, new transmissions and engines which are introduced specifically for a new car can be determined. Specific and general explanatory notes are given in a table at the beginning of the worksheets.

The detail worksheets are best used to determine the gear ratios for different transmissions and the axle ratios used with different models or to determine more detailed information pertaining to availability based on the different emission requirements. The summary charts found in Sections 2 through 5 provide information on the production and matching of different engines and transmissions for 1975 through 1978 for each manufacturer and the usage of each engine and transmission type by model for each of those years. The summary charts are explained in Section 1.3.

### 1.3 SUMMARY CHARTS

Due to the complexity and quantity of information provided at the detailed worksheet level, a series of five additional charts were designed in order to summarize, by manufacturer, significant results and conclusions. The objective of these charts was to provide a guide to the engine/driveline trends of each manufacturer and to provide a base for projecting future trends.

Some of the trends deduced from the summary charts include:

- 1) The use of more manual transmissions especially four and five speed manuals;
- 2) Reduction in the number of V-8 engines especially large block V-8's;

- 3) The increase in the number and use of L-4 and V-6 engines;
- 4) The addition of lock-up torque converters to automatic transmissions; and
- 5) The addition of transverse mounted engines and the conversion of current engines to transverse mounting to accommodate more front-wheel-drive vehicles.

These summary charts provide the following additional information:

- a) Engines in Production - Indicates historical and projected use of engines by an auto manufacturer. The year new engines are introduced and the year in which engines were deleted is clearly shown;
- b) Transmissions in Production - Displays historical and projected transmission usage including new and discontinued transmissions. Manual and automatic transmissions are segregated; the number of forward speeds and the first gear ratio are shown for each transmission as well as the manufacturer (division or independent supplier when known);
- c) Calendar of Engine/Transmission Combinations - Depicts all engines and transmissions and how they were matched by model year;
- d) Automatic vs. Manual Transmission Availability - Shows which vehicle models use each engine by transmission type (manual or automatic);
- e) Calendar of Model/Engine Combinations - Displays the evolution of engine usage from 1975 to 1980. New vehicle model and engine introductions are highlighted.

The overall trend to smallness, as vehicles are downsized and front-wheel-drive is used more extensively, is readily apparent. In addition to this trend of smallness, there is also a large number of new engines scheduled for introduction which will improve tremendously the industry's flexibility for providing the optimum vehicle/power train combination to meet the more stringent fuel economy and emission standards. This trend is especially pronounced for GM, and for other manufacturers after 1980, as the Master Product Schedules (Volume I) illustrate.

Similarities and differences between manufacturers are easy to determine by taking each manufacturer's summary charts and making direct comparisons. For instance, American Motors is highly dependent on outside suppliers for their transmissions and, in some cases, engines while Chrysler, Ford, and GM are not; as GM was the first to actively pursue downsizing, they have been dropping large block V-8's where Chrysler and Ford have been slower to follow; Chrysler was the first to introduce lock-up torque converters for automatic transmissions; GM makes many minor carburetor and other engine modifications to existing power plants to tune them better to the requirements of the vehicles in which they are going to be installed; and GM was the first to offer a diesel engine or turbo-charging in the quest for increased fuel economy.

AMC is more dependent upon technology improvements achieved by its suppliers (i.e., GM for emission control systems)--hence AMC advances in driveline and engine fuel economy and emission controls will reflect what these sources have to offer.



## 2. GENERAL MOTORS

### 2.1 SUMMARY

General Motors has a large number of engine/transmission combinations to support a line of thirty-one models. Over the period of 1975 to 1980, GM will have used more than fifty-four different engines or engine derivatives and twenty-six different transmissions (nineteen manual and seven automatic) for these models. In 1978 alone, a total of twenty-nine engines and eighteen transmissions (thirteen manual and five automatic) were offered. Over the next few years, General Motors has scheduled the introduction of a large number of new engines and derivatives to meet increased fuel economy and emission goals. These introductions include such features as smaller size displacement, light weight construction, higher power output, turbocharging, dieselization, transverse mounting, and new carburetion and fuel metering designs.

Most GM automatic transmissions are produced by Hydramatic Division for the various car divisions. A limited number of automatics such as the CBC 350, however, are produced jointly by the Chevrolet Division and the Canadian Division. In this analysis, all CBC 350 transmissions are identified as THM 350's for the sake of simplicity due to their essentially identical characteristics. In most cases, the choice between the Chevrolet and Hydramatic versions is a manufacturing option.

The detailed information worksheets (engine-transmission-rear axle product schedule) for General Motors are found in Appendix A. The summary charts are described in Sections 2.2 through 2.6 (Figures 2-1 through 2-8).

### 2.2 ENGINES IN PRODUCTION (Figure 2-1)

This figure displays the production availability of all General Motors engines from 1975 through 1978. Those new engines which have been scheduled for introduction in 1979 and 1980, as publicly reported, are also identified to show future trends. For this analysis, a "new" engine signifies any modification to the engine or fuel metering system which results in a new manufacturer engine code.

Engine description includes: type, size (in CID), fuel metering (number of carburetor barrels or fuel injection, EFI), engine code, and division. Important characteristics pertaining to specific engines are also shown (i.e., turbocharged, diesel, light weight, transverse, high performance).

Fifty-four engines are listed for use during the period 1975 through 1980. Of these, thirty-one were introduced during this period: eleven new four cylinder engines; seven new V-6 engines; six new small V-8's (305 CID or less); and seven new large block V-8's (350 CID to 425 CID). During this period nineteen engines were dropped: five four-cylinder engines (four of which were Chevrolet aluminum block engines: 122 CID-FI, LY3; 140 CID-1V, L13; 140 CID-2V, L11; and 140 CID-2V, high-output); one V-6 (the Buick odd firing 231 CID V-6 which was replaced by an even firing version); one small V-8 (the 262 CID Chevy V-8, a new small block Chevy V-8 is currently in development); and twelve large block V-8's (350 CID or larger, six of them 454 CID or larger). New engines of special note in 1978 were the Oldsmobile diesel 350 CID V-8 engine and two new 231 CID V-6 turbocharged engines (one 2-barrel and one 4-barrel carburetor). Refer to Figure 2-8 for a correlation of these engines against model changes (described in Section 2.6).

Items of particular note which require some additional comment are discussed below. Chevrolet introduced a new 97.6 CID engine in 1978 (the LW5) which uses a different carburetor than the LY5 97.6 CID and has a higher power output. Since the 85 CID engine was discontinued, the LW5 is used as an optional engine for the Chevette with the LY5 standard. In 1976 Chevy introduced the 122 CID LY3 4-cylinder aluminum block engine which was a destroked 140 CID aluminum block engine. The 122 CID engine was an overhead camshaft version with fuel-injection and a much higher power output specifically designed for the Cosworth Vega hatchback sport model which was discontinued in 1977. Pontiac introduced their new "Iron Duke" 151 CID LX6 engine for 1977 and the LS6 version specifically for the California emission standards in 1978. Chevrolet produces four different four-barrel carburetor 350 CID engines: the LM1 is the

standard engine; the LMI/Z28 is a high power sport version used only by the Z28 series Camaro; the L48 is the standard engine used by the Corvette; and the L82 is the higher power output version optional on the Corvette. The Pontiac W72 version of their L78 400 CID-4V engine is a high power engine used only on the Firebird Formula and Trans Am series sports cars.

### 2.3 TRANSMISSIONS IN PRODUCTION (Figure 2-2)

This chart depicts the transmission usage for General Motors from 1975 through 1978 with projections for 1979 and 1980. Information provided pertaining to each transmission includes: the number of forward speeds, first gear ratio, manufacturer (GM Division or independent supplier), and transmission code number for automatic transmissions. Bold outlining highlights the introduction year for new transmissions. Of the twenty-six transmissions listed, eighteen of them were used in 1978 (thirteen manual and five automatic). The automatic transmissions (which GM calls Turbo Hydramatic) are distinguished by code numbers. A code ending in 25 (i.e., THM 325) designates a front-wheel-drive configuration. The THM 125 transverse automatic is projected for introduction in 1980 for use on the new front-wheel-drive compact X-bodies.

All GM automatic transmissions are currently three-speed without lock-up torque converters, although four-speed and lock-up versions are projected in the future (see Volume I). New smaller and lighter transmissions (THM 180 and THM 200) have been added in recent years for use with the new generation of smaller lighter engines and vehicles.

Many new manual gear boxes have been added since 1976 which utilize new gear ratios; the addition of five-speed combinations are the most significant. It is observed that GM makes frequent changes in manual transmissions, while the automatics are more stable.

### 2.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 2-3)

This chart matches the different engines and transmissions in use from 1975 through 1978. Laid out in matrix form, the year that

each engine was mated with a given transmission is shown by year slots in the matrix center; projected usage for 1979 and 1980 is also shown. Engine and transmission descriptions are consistent with those given in Figures 2-1 and 2-2 (Engines and Transmissions in Production).

By studying this chart, several trends in the use of engines and transmissions can be observed. An increased number of four and six cylinder engines are being offered with four and five speed manual transmissions as the public has become aware of the increased fuel economy potential of these combinations. Also apparent is the increased availability of more than one type of automatic transmission for each engine. This is especially evident with the THM 200 and THM 250 transmissions which are common with many engines, often as engineering options. This allows GM the alternative of using a lighter weight transmission for smaller load ranges such as in coupes, and a heavier one for those vehicles (such as wagons) requiring it.

#### 2.5 AUTOMATIC VS MANUAL TRANSMISSION AVAILABILITY (Figures 2-4 through 2-7)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many combinations only one transmission type is offered. In this presentation, all of the combinations by transmission type are given by model year (one figure for each year, 1975-1978). The models are categorized by market class as defined in Volume I, Master Product Schedules, to assist in making vehicle to vehicle comparisons. Engine descriptions are consistent with those given in Figure 2-1 (Engines in Production); bold outlining signifies new introductions in the applicable years.

Several observations can be made from this data. Manual transmissions are not usually used in large V-8 engines except in specialty sport models (i.e., Corvette, Firebird, Camaro); four and six cylinder engines are generally available with both automatic and manual transmissions.



## 2.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 2-8)

Similar in format to "Automatic vs Manual Transmission Availability" (except that transmission type has been deleted and all information for years 1975 through 1980 has been consolidated), this chart illustrates that some engines were specifically introduced for use on particular new vehicles. Models are broken down by market class with the year each model was new (from 1975 through 1978) shown after the name. Engine information is similar to the other charts except that the introduction year (from 1975 through 1980) is also given. Time slots (similar to those used in Figure 2-3, Calendar of Engine/Transmission Combinations) depict available engine/vehicle combinations for each model year. Projected usage for 1979 and 1980 is shown by the use of parenthesis. Whenever a new model and engine are simultaneously introduced in a given year, bold outlining around the year highlights the event.

The trend towards models with smaller engines can be seen as the larger V-8 engines are dropped and new V-6 and 4-cylinder engines are added. Frequently, changes in engine sizes offered coincide with vehicle downsizing and weight reduction programs. Examples of new smaller engines accompanying new vehicle sizes include: the 1976 introduction of the Chevette and its accompanying two small 4-cylinder engines; the new 196 CID and 200 CID V-6 engines introduced in 1978 for the downsized intermediate models; the new 425 CID V-8 engine introduced in 1977 for the downsized Cadillacs; and the new 403 CID Oldsmobile V-8 engine introduced in 1977 for use on the downsized standard full-size vehicles.

On occasion, however, use of smaller engines (particularly as standard equipment) precedes vehicle downsizing; this also results in improved fuel economy but with some sacrifice in performance. Examples of engine size reduction without vehicle downsizing include: the 1977 addition of the 151 CID 4-cylinder engine to the Ventura/Phoenix and the 1976 addition of the 231 CID V-6 engine to the LeSabre.



ENGINE	MODEL YEAR						
	1975	1976	1977	1978	1979	1980	1981
IL-4 85CID-1V LX3 (CHEVY)	NEW	[ ]			DISCONTINUED		
IL-4 97.6CID-1V LY5 (CHEVY)	NEW	[ ]			[ ]		
IL-4 97.6CID-1V LW5 (CHEVY)			NEW	[ ]	[ ]		
IL-4 110.8CID-2V (ISUZU)	NEW	[ ]			[ ]		
IL-4 122CID-FI LY3 (CHEVY)	NEW	[ ]	DISCONTINUED				
IL-4 140CID-1V L13 (CHEVY)	[ ]		DISCONTINUED				
IL-4 140CID-2V L11 (CHEVY)	[ ]			DISCONTINUED			
IL-4 140CID-2V HI-OUTPUT (CHEVY)	[ ]		DISCONTINUED				
IL-4 151CID-2V LX6 (PONTIAC)		NEW	[ ]		[ ]		
IL-4 151CID-2V LS6 (PONTIAC)			NEW	[ ]	[ ]		

FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81  
2-6

ENGINE	MODEL YEAR						
	1975	1976	1977	1978	1979	1980	1981
IL-4 151CID HI-PERFORMANCE (PONTIAC)				NEW	[ ]		
IL-4 151CID TURBO (PONTIAC)				NEW	[ ]		
IL-4 151CID LT. WEIGHT (PONTIAC)					NEW	[ ]	
IL-4 151CID TRANSVERSE (PONTIAC)						NEW	[ ]
----- 6 CYLINDER -----							
V-6 (60°) 171CID TRANSVERSE (CHEVY)						NEW	[ ]
V-6 196CID-2V LC9 (BUICK)				NEW	[ ]		
V-6 200CID-2V L26 (CHEVY)				NEW	[ ]		
V-6 231CID-2V LD7 (BUICK)	NEW						DISCONTINUED
V-6 (EVEN FIRING) 231CID-2V LD5 (BUICK)				NEW	[ ]		

FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED)

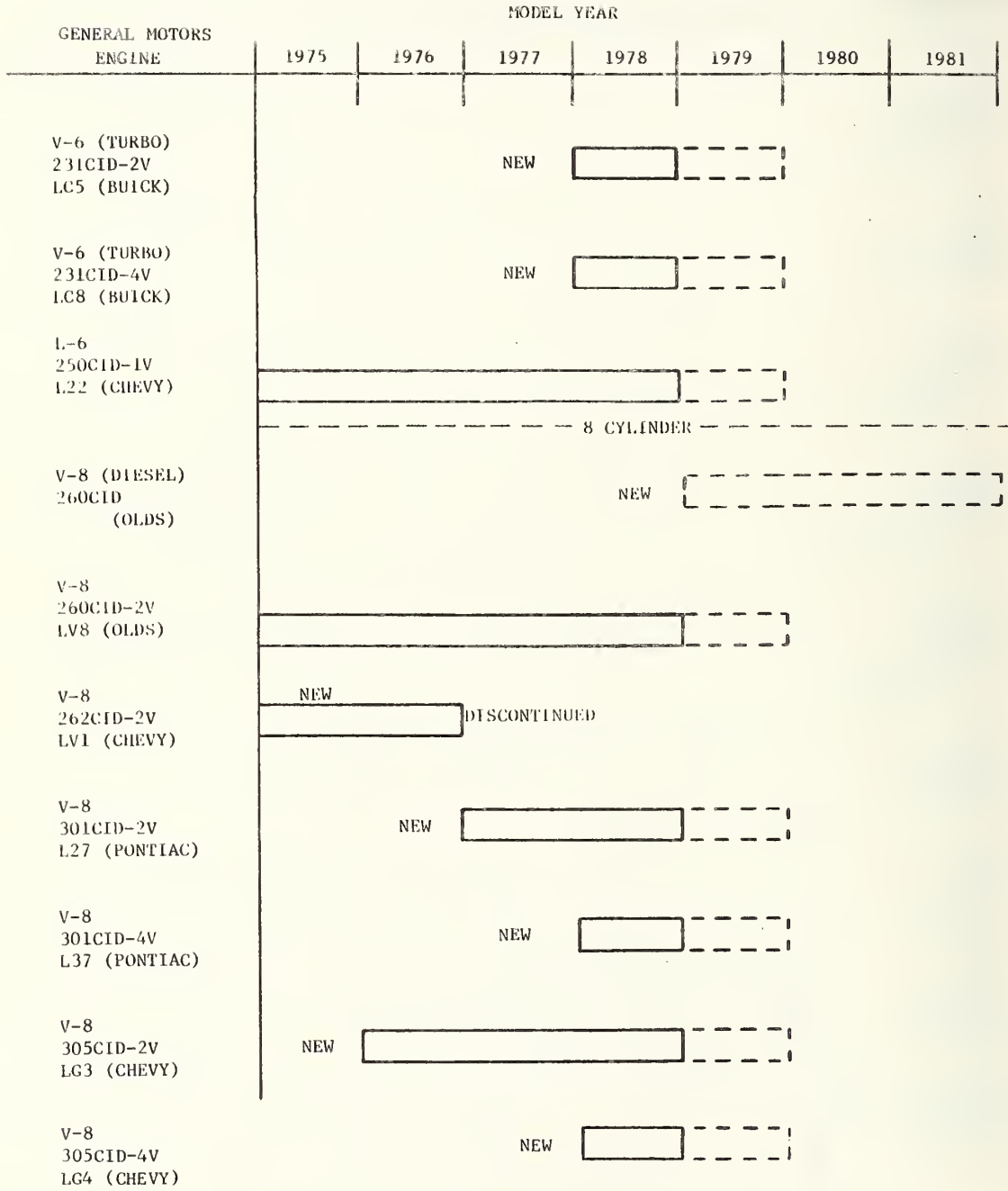


FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED)

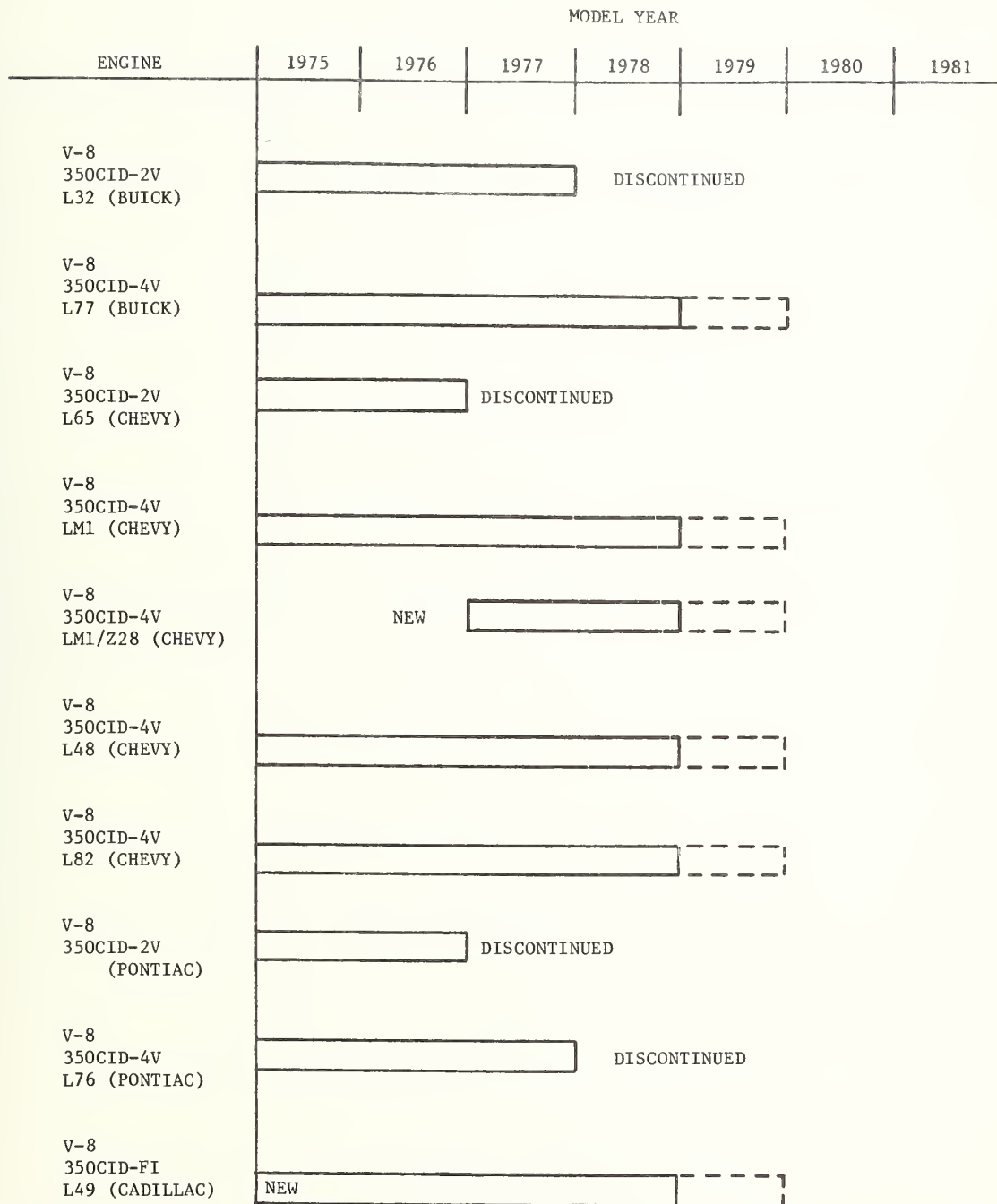


FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED)

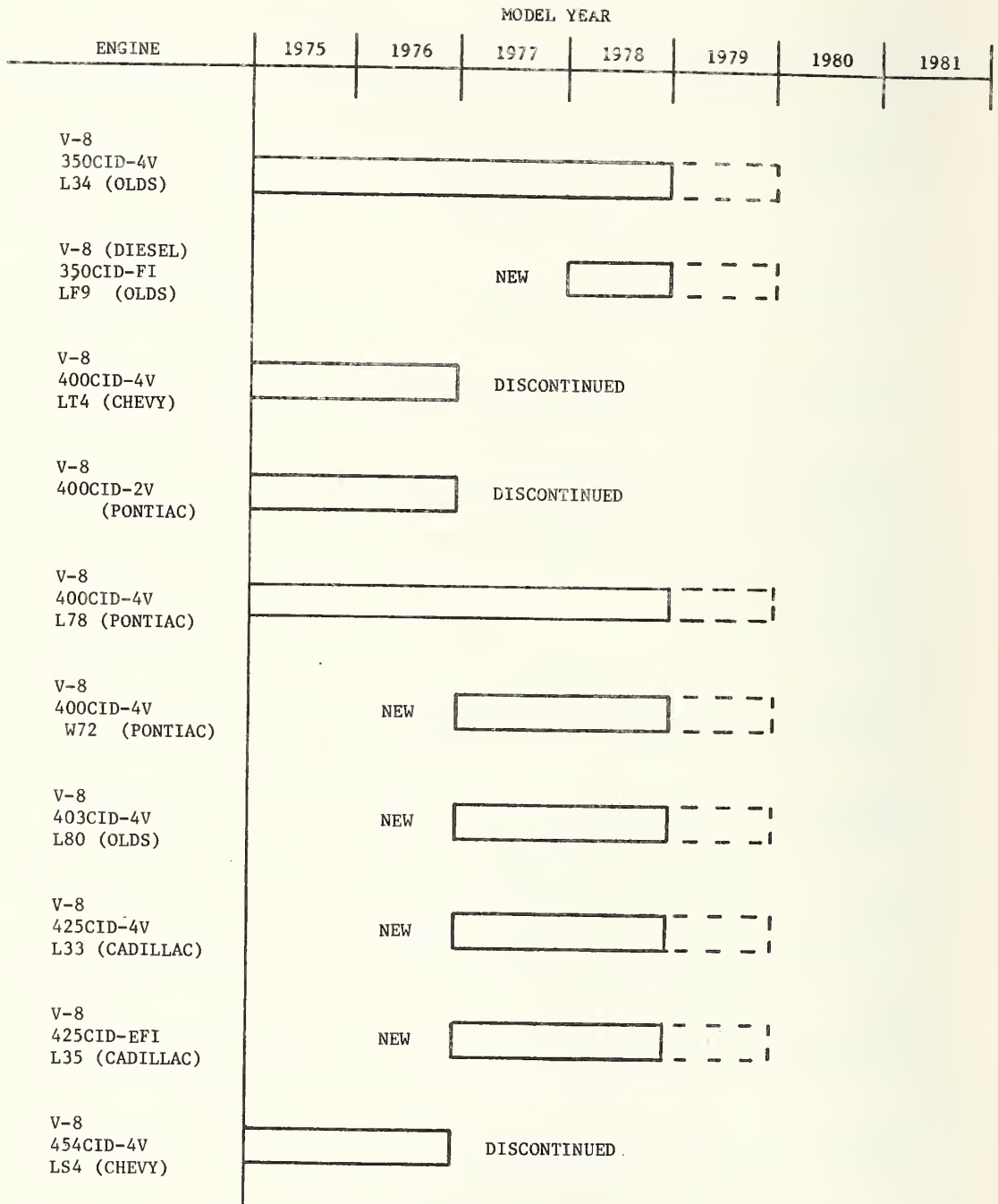


FIGURE 2-1. GM ENGINES IN PRODUCTION, 1975-81 (CONTINUED)



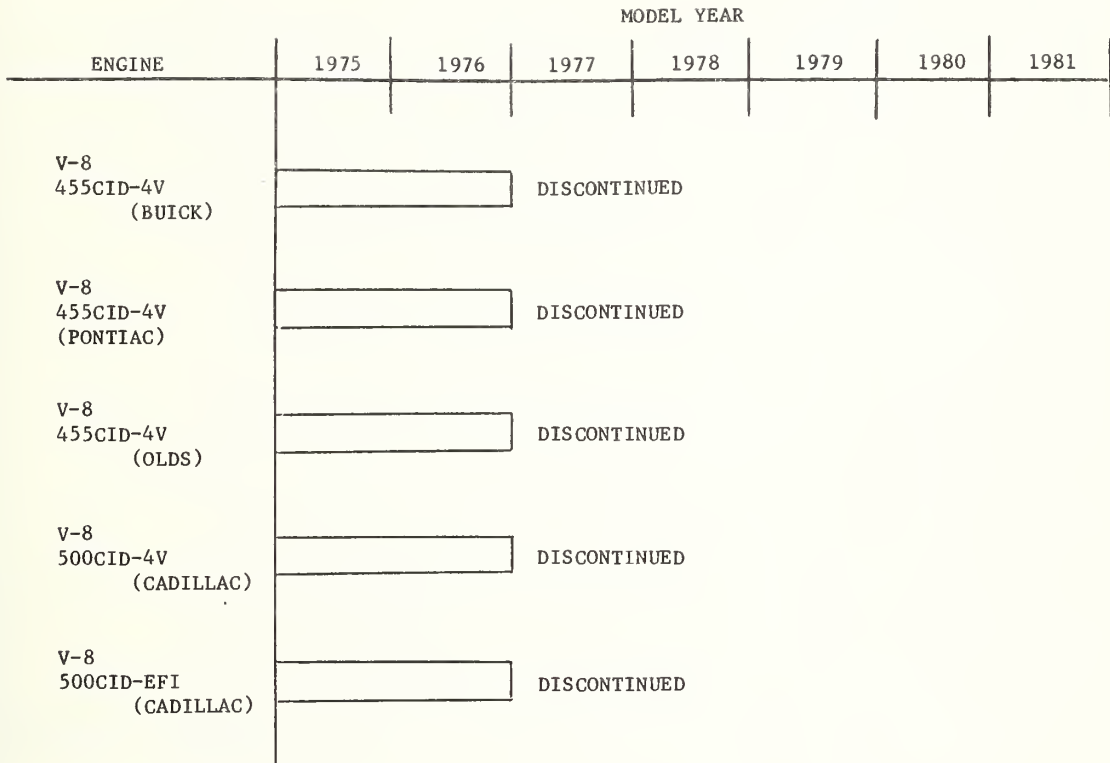


FIGURE 2-1. GM ENGINES IN PRODUCTION,  
1975-81 (CONCLUDED)

GENERAL MOTORS		FORWARD SPEEDS GEAR RATIO IN FIRST		MANUFACTURER	TYPE	1975	1976	1977	1978	1979	1980	1981	1982
DAIKIN	3.51	5	MANUAL										
CHEVROLET	3.41	5											
CHEVROLET	3.40	5											
CHEVROLET	3.10	5											
BORG & BECK	3.75	4											
CHEVROLET	3.75	4											
DAIKIN	3.51	4											
CHEVROLET	3.50	4											
CHEVROLET	3.11	4											
BORG & BECK	2.85	4											
CHEVROLET	2.85	4											
CHEVROLET	2.64	4											
CHEVROLET	2.54	4											
BORG & BECK	2.43	4											
CHEVROLET	2.43	4											
BORG & BECK	3.50	3											
CHEVROLET	3.50	3											
CHEVROLET	3.11	3											
CHEVROLET	2.85	3											
TURBO HYDRAMATIC THM 125		3		AUTOMATIC									
TURBO HYDRAMATIC THM 180	2.40	3											
TURBO HYDRAMATIC THM 200	2.74	3											
TURBO HYDRAMATIC THM 325		3											
TURBO HYDRAMATIC THM 350	2.52	3											
TURBO HYDRAMATIC THM 400	2.48	3											
TURBO HYDRAMATIC THM 425	2.48	3											

FIGURE 2-2. GM TRANSMISSIONS IN PRODUCTION, 1975-80

REVISED: 8/1/78 AC-CTP

ENGINE	MANUAL TRANSMISSION										AUTOMATIC													
	5	5	5	5	5	4	4	4	4	4	5	5	5	5	5	4	4	4	4	4				
GEAR RATIO IN FIRST	3.51	3.41	3.40	3.10	3.75	3.51	3.50	3.11	2.85	2.85	2.64	2.54	2.43	2.43	3.50	3.11	2.85	2.60	2.74	2.52	2.48	2.48		
MANUFACTURER DIVISION	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	DAIKIN	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	THM 425	THM 400 HYDRAMATIC	THM 550 HYDRAMATIC	THM 200 HYDRAMATIC	THM 180 HYDRAMATIC	THM 425 HYDRAMATIC	
IL-4, 85CID-1V LX3 (CHEV)	7	6																						
IL-4, 97.6CID-1V LX5 (CHEV)																								
IL-4, 97.6CID-1V LX5 (CHEV)																								
IL-4, 110.8CID-2V (ISUZU)																								
IL-4, 122CID-FI LY3 (CHEV)																								
IL-4, 140CID-1V LX3 (CHEV)																								
IL-4, 140CID-2V LX1 (CHEV)																								
IL-4, 140CID-2V H-0 (CHEV)																								
IL-4, 151CID-2V LX6 (PONTIAC)																								
IL-4, 151CID-2V LS6 (PONTIAC)																								
IL-4, 151CID HI-PERF (PONTIAC)																								

5 6 } YEAR  
 7 8 } SLOTS  
 9 0 } '75-'80  
 1975 = 5  
 1976 = 6  
 ( ) = PROJECTED  
 USAGE

FIGURE 2-3. GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80

REVISED: 8/1/78, AC-CTP

ENGINE	MANUAL TRANSMISSION										AUTOMATIC													
	5	5	5	4	4	4	4	4	4	4	3	3	3	3	3	3								
GEAR RATIO IN FIRST	3.51	3.41	3.40	3.10	3.75	3.75	3.51	3.50	3.11	2.85	2.85	2.64	2.54	2.43	2.43	3.50	3.50	3.11	2.85	2.40	2.74	2.52	2.48	2.48
MANUFACTURER DIVISION	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET
IL-4, 151CID TURBO (PONTIAC)																								
IL-4, 151CID I.T.P.T. (PONTIAC)																								
IL-4, 151CID TRANS. (PONTIAC)																								
V-6 (60°), 171CID TRANS. (CHEVY)																								
V-6, 196CID-2V LC9 (BUICK)																								
V-6, 200CID-2V L26 (CHEVY)																								
V-6, 231CID-2V LD7 (BUICK)																								
V-6, 231CID-2V LD5 (BUICK) EVEN																								
V-6, 231CID-2V LC5 (BUICK) TURBO																								
V-6, 231CID-4V LCR (BUICK) TURBO																								
I-6, 230CID-IV I-22 (CHEVY)																								

5 6 } YEAR  
 7 8 } SLOTS  
 9 0 } '75-'80  
 1975 = 5  
 1976 = 6, ETC.  
 ( ) = PROJECTED USAGE

FIGURE 2-3. GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONTINUED)

REVISED: 8/1/78 AC-CTP

ENGINE	MANUAL TRANSMISSION												AUTOMATIC													
	5	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3								
GEAR RATIO IN FIRST	3.51	3.41	3.40	3.10	3.75	3.75	3.51	3.50	3.11	2.85	2.85	2.64	2.54	2.43	2.43	3.50	3.50	3.11	2.85	2.40	2.74	2.52	2.48	2.48		
MANUFACTURER DIVISION	CHEVROLET	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	
YEAR	6	8			7																					
SLOTS	(9)				5	6																				
PROJECTED USAGE																										
V-8, 260CID (OLDS) DIESEL																										
V-8, 260CID-2V LV8 (OLDS)																										
V-8, 262CID-2V LV1 (CHEVY)																										
V-8, 301CID-2V L27 (PONTIAC)																										
V-8, 301CID-4V L37 (PONTIAC)																										
V-8, 305CID-2V L63 (CHEVY)																										
V-8, 305CID-4V L64 (CHEVY)																										
V-8, 350CID-2V L32 (BUICK)																										
V-8, 350CID-4V L77 (BUICK)																										
V-8, 350CID-2V L65 (CHEVY)																										
V-8, 350CID-4V LM1 (CHEVY)																										

5 6 } YEAR  
7 8 } SLOTS  
9 0 } 1975-80  
1975 = 5  
1976 = 6, ETC.  
( ) = PROJECTED USAGE

FIGURE 2-3. GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONTINUED)



REVISED: 8/1/78 AC-CTP

GENERAL MOTORS 1975-1980	MANUAL TRANSMISSION												AUTOMATIC												
	5	5	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3						
GEAR RATIO IN FIRST	3.51	3.41	3.40	3.10	3.75	3.75	3.51	3.50	3.11	2.85	2.85	2.64	2.54	2.43	2.43	3.50	3.11	2.85	2.40	2.70	2.52	2.48	2.48		
MANUFACTURER DIVISION	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	
ENGINE	V-8, 350CID-4V LMI/228 (CHEVY)	V-8, 350CID-4V L48 (CHEVY)	V-8, 350CID-4V L82 (CHEVY)	V-8, 350CID-2V (PONTIAC)	V-8, 350CID-4V L76 (PONTIAC)	V-8, 350CID-4V L49 (CADILLAC)	V-8, 350CID-4V L34 (OLDS)	V-8, 350CID-FI LF9 (OLDS) DIESEL	V-8, 400CID-4V LT4 (CHEVY)	V-8, 400CID-2V (PONTIAC)	V-8, 400CID-4V L78 (PONTIAC)														

5 6 } YEAR  
7 8 } SLOTS  
9 0 } '75-'80

1975 = 5  
 1976 = 6, ETC.  
 ( ) = PROJECTED USAGE

FIGURE 2-3. GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONTINUED)

REVISED: 8/1/78 AC-CTP

GENERAL MOTORS 1975-1980	MANUAL TRANSMISSION												AUTOMATIC										
	5	5	5	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3				
GEAR RATIO IN FIRST	3.57	3.41	3.40	3.10	3.75	3.51	3.50	3.11	2.85	2.85	2.64	2.54	2.47	2.43	3.50	3.11	2.85	2.40	2.74	2.52	2.48	2.48	
MANUFACTURER DIVISION	CHEVROLET	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	BORG & BECK	CHEVROLET	BORG & BECK	CHEVROLET	CHEVROLET	CHEVROLET	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	TURBO HYDRAMATIC	
ENGINE	V-8, 400CID-4V W72 (PONTIAC)	V-8, 403CID-4V L80 (OLDS)	V-8, 425CID-4V L33 (CADILLAC)	V-8, 425CID-BFI, L35 (CADILLAC)	V-8, 454CID-4V S4 (CHEVY)	V-8, 455CID-4V (BUICK)	V-8, 455CID-4V (PONTIAC)	V-8, 455CID-4V (OLDS)	V-8, 500CID-4V (CADILLAC)	V-8, 500CID-BFI (CADILLAC)													
							7 8 (9)																

5 6 YEAR  
7 8 SLOTS  
9 0 } 1975-80  
( ) = PROJECTED USAGE

FIGURE 2-3. GM CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-80 (CONCLUDED)

MODEL	IL-4	IL-4	V-6	IL-6	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8	V-8
ENGINE C.I.D. CARB. BBL. DIVISION CODE	IL-4 140 2V CH L13	IL-4 231 2V BU L07	V-6 250 2V CH L22	V-8 260 2V CH L11	V-8 262 2V CH L32	V-8 350 2V BU L77	V-8 350 2V BU L65	V-8 350 2V CH L48	V-8 350 2V CH L82	V-8 350 2V PO L76	V-8 350 2V PO L49	V-8 350 2V CAD L34	V-8 350 2V FI L74	V-8 400 2V PO L78	V-8 400 2V PO L54	V-8 400 2V PO L54	V-8 455 4V PO L54	V-8 455 4V PO L54	V-8 500 4V CAD	
-SUBCOMPACT-	A/M	A/M		A/M				A/M												
ASTRE																				
CORVETTE																				
MONZA																				
SKYHAWK																				
STARFIRE																				
VEGA																				
-COMPACT-																				
CAMARO																				
FIREBIRD																				
NOVA																				
OMEGA																				
SKYLARK/APOLLO																				
VENTURA																				
-INTERMEDIATE-																				
CENTURY																				
CHEVELLE																				
CUTLASS																				
GRAND PRIX																				
LE MANS																				
MONTÉ CARLO																				
SEVILLE																				
-FULL SIZE-																				
CHEVROLET																				
DELTA 88																				
LE SABRE																				
PONTIAC																				
-LUXURY STANDARD-																				
ELECTRA																				
NINETY EIGHT																				
RIVIERA																				
TORONADO																				
ELDORADO																				
CADILLAC																				

A = AUTOMATIC TRANSMISSION  
M = MANUAL TRANSMISSION

FIGURE 2-4. G.I. AUTOMATIC VS MANUAL TRANSMISSION AVAILABILITY, 1975









ENGINE	MINI			SUBCOMPACT				COMPACT				INTERMEDIATE				STANDARD				FULL SIZE																	
	CHEVETTE '76	ASTRE '75	CORVETTE	MONZA '75	OPREL '76	SPARK '75	STARFIRE '75	VEGA	CAMARO	LIBERADO	NOVA	OMEGA	STARBUCK/POLLO	GENERAL PONTIAC	REGAL '78	CENTURY '78	CHEVETTE/MALIBU '78	GRAND PRIX '78	LE MANS '78	MONTE CARLO '78	SEVILLE '78	CHEVROLET '77	DELTA 88 '77	PONTIAC '77	GALDIAK '77	ELDKRUD	ELECTRA '77	MINNETAHOKE '77	RIVERDALE '77	TORONADO							
IL-4 '76	7																																				
85CID-1V																																					
LX3 (CHEVY)																																					
IL-4 '76	7																																				
97.6CID-1V																																					
LY3 (CHEVY)	(9)																																				
IL-4 '78	8																																				
97.6CID-1V	(9)																																				
LS5 (CHEVY)																																					
IL-4 '76																																					
110.8CID-2V (ISUZU)																																					
IL-4 '76																																					
122CID-FI																																					
LY3 (CHEVY)																																					
IL-4																																					
140CID-1V																																					
L13 (CHEVY)																																					
IL-4	5																																				
160CID-2V	6																																				
L11 (CHEVY)																																					
IL-4	5																																				
160CID-2V	6																																				
L11 (CHEVY)	7																																				
IL-4 '76																																					
140CID-2V																																					
HI-OUTPUT (CHEVY)																																					
IL-4 '77	7																																				
151CID-2V																																					
LX6 (PONTIAC)	8																																				
IL-4 '78																																					
151CID-2V																																					
LS6 (PONTIAC)	8																																				
IL-4																																					
151CID																																					
HI-PERFORMANCE (PONTIAC)	(NEW FOR MID 1978)																																				

NOTE:  
 5 = 1975  
 6 = 1976, ETC.  
 ( ) PROJECTED  
 USAGE

5	6	YEAR
7	8	SLOTS
9	0	'75-'80

FIGURE 2-8. GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79

ENGINE	MINI		SUBCOMPACT				COMPACT				INTERMEDIATE				STANDARD				FULL SIZE				LUXURY							
	ASTRA '76	CORVETTE '75	MONZA '75	ORL '76	SKYARK '75	STARLINE '75	VEGA	CAMARO	FIREBIRD	NOVA	OMEGA	SKYLARK/APOLLO	REGAL '78	CENTURY '78	CHEVETTE/MALIBU '78	GRAND PRIX '78	LE MANS '78	MONTE CARLO '78	SEVILLE '75	CHEVROLET '77	DETRA '88	PONTIAC '77	PONTIAC '77	CADILLAC '77	ELDMORADO	ELEGIA	WINDY EIGHT '77	RIVIERA '77	TOURNADE	
IL-4 151-CID TURBO (PONTIAC)																														
IL-4 151CID LT. WEIGHT (PONTIAC)																														
IL-4 151CID TRANSVERSE (PONTIAC)																														
V-6 (60°) 171CID TRANSVERSE (CHEVY)																														
V-6 '78 196CID-2V LC9 (BUICK)			8 (9)																											
V-6 '78 200CID-2V L26 (CHEVY)																														
V-6 '75 231CID-2V LD7 (BUICK)				3 6 7	6 6 7																									
V-6 (EVEN FIRING) '78 231CID-2V LD5 (BUICK)																														
V-6 (TURBO) '78 231CID-2V LC5 (BUICK)																														
V-6 (TURBO) '78 231CID-4V LC8 (BUICK)																														
L-6 250CID-1V L22 (CHEVY)																														

NOTE:  
5 = 1975  
6 = 1976, ETC.  
( ) PROJECTED  
USAGE

5	6	YEAR
7	8	SLOTS
9	10	'75-'80

FIGURE 2-8. GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONTINUED)

ENGINE	MINI				SUBCOMPACT				COMPACT				INTERMEDIATE				STANDARD				FULL SIZE				LUXURY											
	CHEVETTE '76	ASTRE '75	CONCRETE	NOVA '75	OPEL '76	SKYLARK '75	STANFENE '75	SUNBIRD '76	VEGA	CAMARO	PUEBLO	NOVA	OMEGA	SKYLARK/ASTRO	REGAL '78	CENTURY '78	CHEVETTE/MAJIBU '78	GULFSTREAM '78	GRAND PRIX '78	LE MANS '78	MONTE CARLO '78	SEVILLE '78	CHEVROLET '75	DELTA 88 '77	PONTIAC '77	LESABRE '77	PONTIAC '77	GADSDEN '77	ELDMADO	ELECTRA '77	NINETY EIGHT '77	RIVERIA '77	TORNADO			
	NEW FOR 1979																																			
V-8 (DIESEL) 260CID (OLDS)																																				
V-8 260CID-2V LV8 (OLDS)																																				
V-8 '75 262CID-2V LV1 (CHEVY)																																				
V-8 '77 301CID-2V L27 (PONTIAC)																																				
V-8 '78 301CID-4V L37 (PONTIAC)																																				
V-8 '76 305CID-2V LC3 (CHEVY)																																				
V-8 '78 305CID-4V LG4 (CHEVY)																																				
V-8 350CID-2V L32 (BUICK)																																				

NOTE:

5 = 1975  
6 = 1976, ETC.  
( ) PROJECTED USAGE

YEAR	5	6
SLOTS	7	8
'75-'80	9	0

FIGURE 2-8. GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONTINUED)

ENGINE	MINI			SUBCOMPACT				COMPACT				INTERMEDIATE					STANDARD				FULL SIZE			LUXURY												
	Chevy '76	Opel '75	Comp. '75	Kovax '75	Opel '75	Synkro '75	Starfire '75	Swanfire '76	Vega	Camaro	Pontiac	Novra	Omega	Sylark/Polio	Ventura/Protek	Regal '78	Century '78	Chevils/Malibu '78	Grand Prix '78	Le Mans '78	Monte Carlo '78	Seville '75	Chevrolet '75		Delta 88 '77	Lesabre '77	Pontiac '77	Cadillac '77	Eldorado	Electra '77	Ninety Eight '77	Tempra '77	Toronado			
V-8 350CID-4V L77 (BUICK)									5 6 5 6 5 6							5 6							5 6	7 8			7 8									
V-8 350CID-2V L65 (CHEVY)																					5 6															
V-8 350CID-4V LM1 (CHEVY)																																				
V-8 '77 350CID-4V LM1/228 (CHEVY)																																				
V-8 350CID-4V L48 (CHEVY)																																				
V-8 350CID-4V L82 (CHEVY)																																				
V-8 350CID-2V (PONTIAC)																																				
V-8 350CID-4V L76 (PONTIAC)																																				

NOTE:  
5 = 1975  
6 = 1976, ETC.  
( ) PROJECTED USAGE

5 7 9 YEAR  
6 8 10 SLOTS  
'75-'80

FIGURE 2-8. GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONTINUED)



ENGINE	ENGINES VS. MODELS															NOTE:																		
	MIDI			SUBCOMPACT			COMPACT			INTERMEDIATE			STANDARD				LUXURY																	
	CHEVETTE '76	ASIRE '75	CONCRETE	MONZA '75	OPEL '76	SPARK '75	STARLINE '75	SUNRAID '76	PEGA	CAMARO	FIREBIRD	NOVA	OMEGA	SCITAK/ARLDO	VENTURA/PHEONIX '78	CENTURY '78	CHEVETTE/MALIBU '78	GRAND PRIX '78	LE MANE '78	MONTE CARLO '78	SEVILLE '78	CHEVROLET '77	DETRA '80 '77	LAZARE '77	PONTIAC '77	CADILLAC '77	ELDORADO	BISCAYA '77	SEVILLA '77	NINEVE EIGHT '77	REVERA '77	TORNADO		
V-8 '75 350CID-FI L49 (CADILLAC)																																		
V-8 350CID-4V L34 (OLDS)																																		
V-8 DIESEL '78 350CID-FI 1F9 (OLDS)																																		
V-8 400CID-4V L74 (CHEVY)																																		
V-8 400CID-2V (PONTIAC)																																		
V-8 400CID-4V L78 (PONTIAC)																																		
V-8 '77 400CID-4V W72 (PONTIAC)																																		
V-8 '77 403CID-4V L80 (OLDS)																																		

NOTE:  
5 = 1975  
6 = 1976, ETC.  
( ) PROJECTED  
USAGE

5	6	7	8
7	8	9	0

YEAR  
SLOTS  
'75-'80

FIGURE 2-8. GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONTINUED)

GENERAL MOTORS 1975-1980 REVISION: 8/1/78 AC-CTP

ENGINE	ENGINES VS. MODELS											LUXURY																						
	MINI			SUBCOMPACT			COMPACT			INTERMEDIATE			STANDARD			FULL SIZE																		
	CHEVETTE '76	ASTOR '75	CORVETTE	NOVA '75	OPREL '76	SKYMAK '75	STARLINE '75	SUNBIRD '76	VEGA	CAMARO	FIERO '80	NOVA	OMEGA	SKYARK/APOLLO	PENTANA/PROMIX '78	CENTURY '78	CHEVETTE/MALIBU '78	GRAND PRIX '78	LE MANE '78	NOVA CARLO '78	SEVILLE '75	CHEVROLET '77	DELTA '80 '77	CHEVROLET '77	LESABRE '77	PONTIAC '77	CADILLAC '77	ELDORADO	ELECTRA	NINETY EIGHT '77	RIVIERA '77	TORNADO		
V-8 '77 425CID-4V 1.33 (CADILLAC)																																		
V-8 '77 425CID-EFI L35 (CADILLAC)																																		
V-8 454CID-4V LS4 (CHEVY)																																		
V-8 455CID-4V (BUICK)																																		
V-8 455CID-4V (PONTIAC)																																		
V-8 455CID-4V (OLDS)																																		
V-8 500CID-4V (CADILLAC)																																		
V-8 500CID-EFI (CADILLAC)																																		

NOTE:  
5 = 1975  
6 = 1976, ETC.  
( ) PROJECTED USAGE

YEAR SLOTS  
5 6 7 8 9  
1975-'80

FIGURE 2-8. GM CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-79 (CONCLUDED)



### 3. FORD MOTOR COMPANY

#### 3.1 SUMMARY

Ford has a relatively small number of engines and transmissions for the number of vehicle models produced when compared with General Motors. Over the period of 1975 to 1978, Ford will have used only eleven different engines or engine derivatives and thirteen transmissions (nine manual and four automatic) for eighteen models. In 1978, a total of eleven engines and nine transmissions (five manual and four automatic) were offered.

A relatively small number of new engines and derivatives are scheduled for future introduction. In 1980, a new 255 CID small bore V-8 engine is scheduled for introduction along with a dual displacement version of the 302 CID V-8 engine. Ford is currently developing the PROCOC (programmed combustion) engine which should provide a fuel economy improvement of 20% at low emissions for use in the 1980's. In addition to these engines, new carburetors, fuel metering, and turbochargers are expected. Large engines to be dropped include the 460 CID in 1979 with the introduction of the new Ford downsized standard autos and the 400 CID V-8 in 1980 with the introduction of the new downsized luxury standard Lincoln and Mark V models. Refer to Master Production Schedules (Volume I) for qualitative projections of other new engines and technological advances.

Ford's 351 CID V-8 provides an interesting example of engine development in which a specific displacement is achieved via alternative approaches. There are actually two different engines displacing 351 cubic inches, the modified (M) version and the Windsor (W) version. The 351 M engine was derived from the 400 CID V-8 which had the stroke reduced from 4 inches to 3.5 inches while maintaining the same four-inch bore. The 351 W engine was derived from the 302 CID V-8 which had the stroke increased from 3 inches to 3.5 inches while maintaining the same four-inch bore. The 351M and 351W, therefore, have identical bores and strokes but actually use entirely different blocks. This results in a ninety pound weight

difference between the heavier 351M and the lighter 351W. As vehicles become smaller and lighter, the M version will be phased out in favor of the lighter W version. Although both engines are currently used interchangeably in many models, specific applications dictate a preference (i.e., the 351M is used primarily in heavy duty applications such as station wagons). The Product Schedule in Appendix B makes the distinction in specific applications but, for simplicity, both engines are consolidated as one on the summary charts.

While GM and Chrysler are working with lock-up torque converters on three-speed automatic transmissions, Ford has been developing a four-speed automatic with overdrive called the FIOD (Ford Intergal Overdrive). This transmission allows better matching of engine speed to load especially in city driving but also provides improved economy on the highway. Ford considers this an improvement over the lock-up torque converter as an addition to existing transmissions and expects to have FIOD installed on all standard size cars and some light trucks in 1980.

The detailed information worksheets (Engine-Transmission-Rear Axle Product Schedules) for Ford Motor Company are found in Appendix B. The summary charts are described in Sections 3.2 through 3.6 (Figures 3-1 through 3-5).

### 3.2 ENGINES IN PRODUCTION (Figure 3-1)

This figure displays the production availability of all Ford engines from 1975 through 1979. Engine description includes: type, size (in CID), fuel metering (number of carburetor barrels or variable venturi), and the angle for V-type engines when different from 90°. The page numbers refer to the detailed tabulations in Appendix B (Figure B-1). Eleven engines are listed for use from 1975 through 1979. Of these only three were new during this period, one each of four, six, and eight cylinders. In 1977, variable venturi carburetor (VV) versions of the 170.8 CID V-6 and 302 CID V-8 engines were introduced in some California vehicles as an emission control test. The 98 CID four cylinder engine was new in 1978 and



is made specifically for the Fiesta in a transverse mounted configuration. These engines are shown in bold outline to highlight the year of their introduction.

Large engines were maintained through 1978 but will be phased out over the next two years. The 460 CID V-8 will be dropped in 1975 with the 400 CID V-8 engine only available on the Lincoln and Mark V models. In 1980, when the Lincoln and Mark V are downsized, the 400 CID engine will also be dropped. Ford's somewhat slower trend towards smaller engines is due to a large car downsizing schedule that is two years behind GM.

### 3.3 TRANSMISSIONS IN PRODUCTION (Figure 3-2)

Transmission usage for Ford from 1975 through 1978 is depicted in Figure 3-2 with the year of introduction indicated by bold outlines. Of the thirteen transmissions listed, ten of them were used in 1978 (six manual and four automatic). The automatic transmissions (which Ford calls Select Shift) are distinguished by code: C3, C-4, C-6, and FMX. All Ford automatic transmissions are currently three speed and have remained the same since 1975. No lock-up torque converters are available, although a more efficient low slip torque converter was added in 1978. The four speed FIOD automatic transmission is scheduled for introduction in 1980 as a replacement for the C-6 and FMX automatics on the large cars and engines.

Five new manual transmissions have been introduced since 1976 which utilize new gear ratios. These have generally replaced other discontinued transmissions. Four of these new transmissions were four speed models and one was a three speed; no five speed manual transmissions are projected for Ford. Ford buys all of its manual transmissions from outside suppliers and most of them are outside the U.S. The automatics, on the other hand, are all produced by Ford with only the C-3 produced outside the U.S. This transmission is used primarily on the European 170.8 CID V-6 engine and the 140 CID engine (see Figure 3-3).

### 3.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 3-3)

This figure matches the different engines and transmissions in

use from 1975 through 1978. Using the same format as GM (see Section 2-4), engine and transmission descriptions are consistent with those given in Figures 3-1 and 3-2 (Engines and Transmissions in Production). There are actually two different 351 CID V-8 engines, the modified (M) version and the Windsor (W) version, but for simplicity, they are shown as only one engine. See Section 3.1 for a more complete discussion of the differences between these engines.

The main point generated from this chart is that Ford makes very few engine/transmission changes. Some minor switching of gear ratios has been done in the three and four speed manual transmissions but no major changes have occurred. Ford still has no five speed manual transmissions and has only one three speed which is used with the 200 CID L-6 engine on the Fairmont and Zephyr. All other engines from the 302 CID V-8 and smaller use a four speed manual transmission; engines larger than the 302 CID V-8 use only automatics. The C-4 automatic is the most widely used transmission.

### 3.5 AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY (Figure 3-4)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many cases only one transmission type is offered. One chart presents all of the combinations by transmission type for model years 1975-1978. The models are categorized by market class as defined in Volume I, Master Product Schedules, to assist in making vehicle to vehicle comparisons. The engine descriptions are consistent with those given in Figures 3-1 and 3-3. Bold outlining signifies new introductions in the applicable years.

Several observations can be drawn from this data. Manual transmissions are not used with large V-8 engines (351 CID and greater) while four and six cylinder engines are generally available with both automatic and manual transmissions. The 302 CID V-8 with a two-barrel carburetor and a manual transmission was offered only in the Mustang II, Granada, and Monarch. Models with variable venturi carburetors were only available with automatic transmissions and only

in California in 1978 (except the Versailles). This carburetor is being used in conjunction with feedback controls to help meet the stringent California emission requirements and is being considered for use nationwide in 1980, when a further increase of federal emission standards goes into effect.

The availability of many transmissions (especially manuals) on various model/engine combinations is restricted due to emission standards and testing requirements. This is common with all manufacturers as they must test each combination for three separate standards (Federal, California, and High Altitude). Even though manual transmissions can provide higher fuel economy, they also produce higher emissions due to the gear shift schedules and variability of individual drivers in shifting. Consequently, the availability of some engine-transmission-model combinations will be restricted, especially in California and high altitude areas.

### 3.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 3-5)

Using the same format as GM (see Section 2.6), this chart projects a definite trend to the use of smaller engines and highlights some new engines which were, in some cases, specifically introduced for use on particular new vehicles. An example of a new engine accompanying a new vehicle is the 98 CID four cylinder engine which was introduced in 1978 specifically for the Fiesta.

Examples of the use of smaller engines include two types: the dropping of large engines from the options list and the substitution of smaller engines as standard equipment. The Thunderbird and LTD II dropped the 460 CID V-8 in 1977; while the Granada and Monarch dropped the 351 V-8 engine in 1978. Smaller engines were added as standard equipment on several models including the 302 CID V-8 to the Thunderbird, LTD II, and Ford in 1977; the 351 CID V-8 on the Mercury in 1978; and the 140 CID four cylinder to the Fairmont and Zephyr in 1978 (the Maverick and Comet did not use this engine).

PG	FORD ENGINE	1975	1976	1977	1978	1979	1980	1981
1	IL-4 98CID-2V			NEW	FIESTA			
1	IL-4 140CID-2V							
3	V-6 (60°) 170.8CID-2V							
4	V-6 (60°) '77 170.8CID-VV		NEW					
4	IL-6 200CID-IV							
5	IL-6 250CID-IV							
6	V-8 302CID-2V							
8	V-8 '77 302CID-VV		NEW					
8	V-8 351CID-2V							
10	V-8 400CID-2V							
11	V-8 460CID-4V							

FIGURE 3-1. FORD ENGINES IN PRODUCTION, 1975-79

FORD GEAR RATIO IN FIRST MANUFACTURER AND LOCATION	FORWARD SPEEDS	TYPE	1975	1976	1977	1978	1979	1980	1981	1982
			3.58 4	4.07 4	3.98 4	3.65 4	3.50 4	3.36 4	3.29 4	3.56 3
FERODO (TRANSVERSE)										
HUMMER CO. COLOGNE, GER.										
HUMMER CO. COLOGNE, GER.										
HUMMER CO. COLOGNE, GER.										
WARNER GEAR MUNCIE, IND.										
---										
EREMC CO. GUADALAJARA, MEX.										
EREMC CO. GUADALAJARA, MEX.										
EREMC CO. GUADALAJARA, MEX.										
FORD C-3 BORDEAUX, FRANCE										
FORD C-4 SHARONVILLE, OH										
FORD C-6 LIVONIA, MICH.										
FORD FMX FAIRFAX, OHIO										

FIGURE 3-2. FORD TRANSMISSIONS IN PRODUCTION, 1975-78



FORD 1975 - 1980

ENGINE	MANUAL												AUTOMATIC		
	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3
GEAR RATIO IN FIRST	3.58	4.07	3.98	3.65	3.50	3.36	3.29	3.56	2.99	2.47	2.46	2.46	2.40		
MANUFACTURER LOCATION	FERODO (TRANSVERSE)	HUPNER CO. COLOGNE, GER.	HUPNER CO. COLOGNE, GER.	HUPNER CO. COLOGNE, GER.	WARNER GEAR MONTE, IND.	FRANC CO. QUADAJARA, MEX.	FRANC CO. QUADAJARA, MEX.	FRANC CO. QUADAJARA, MEX.	FORD C-3 BOBBIEUX, MEX.	FORD C-4 SHARONVILLE, FRANCE	FORD C-6 LYONIA, OHIO	FORD FLEX LAYTON, MICH.	FORD FAIRFAX, OHIO		
IL-4 98CID-2V	8														
IL-4 140CID-2V		6 7 8	5 6 7	5 6 7 8	5			5 6 7 8	5 6 7 8						
V-6 (60°) 170.8CID-2V		6 8		5 6 7				6 7 8	5 6 7						
V-6 (60°) 170.8CID-VV								7 8	7						
IL-6 200CID-1V					7	7 8	5 6	8	5 6 7 8						
IL-6 250CID-1V					7 8	7	5 6		5 6 7 8						
V-8 302CID-2V					7 8		5 6		5 6 7 8						
V-8 302CID-VV									7 8						
V-8 351CID-2V									5 6 7 8	5 7	5 6 7 8				
V-8 400CID-2V										5 6 7 8	6 7 8				
V-8 460CID-4V										5 6 7 8					

NOTE:  
 1975 = 5  
 1976 = 6, ETC.  
 ( ) = PROJECTED USAGE

5	6
7	8
9	0

 } YEAR SLOTS '75-'80

FIGURE 3-3. FORD CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-78



MODEL	1975				1976				1977				1978			
	IL-4 140 2V	V-6 170.8 2V	IL-6 200 250 1V IV	V-8 302 351 2V	V-8 400 460 2V	IL-4 140 2V	V-6 170.8 2V	IL-6 200 250 1V IV	V-8 302 351 2V	V-8 400 460 2V	IL-4 140 2V	V-6 170.8 2V	IL-6 200 250 1V IV	V-6 170.8 2V	V-8 302 351 2V	V-8 400 460 2V
MINI FORD '78																
SUBCOMPACT																
BORGAT '75																
MUSTANG II PIXTO																
COMPACT																
CONET / ZEPHYR '78																
LOGANADA '75																
MAVERICK / FAIRMONT '75																
MONARCH '75																
INTERMEDIATE																
COUGAR '77																
ELITE '75																
MONTEGO																
TORINO / LTD II																
F-800 '77																
VENNAILES '77																
FULL SIZE																
FORD '75																
MARK IV/V																
LUNGOON '75																
MERCURY '75																

A = AUTOMATIC TRANSMISSION  
N = MANUAL TRANSMISSION

FIGURE 3-4. FORD AUTOMATIC VS MANUAL TRANSMISSION AVAILABILITY, 1975-78

FORD 1975 - 1980

PC	ENGINES	FORD 1975 - 1980																					
		MINI		SUBCOMPACT			COMPACT			INTERMEDIATE			LUXURY										
		Fiesta '78	Barchat '75	Capri '75	Mustang II	Pinto	Comet	Balmaine '75	Granada '78	Maerck '75	Monaco '75	Zenith '78	Cougar '77	Elite '75	LTD II	Montego	Thunderbird '77	Mustangs '77	Ford '75	Mercury '75	Lincoln '75	Mark IV V	
1	IL-4 '78 98CID-2V	8																					
2	IL-4 140CID-2V	7 8	5 6 5 6 7 8 7 8	8																			
3	V-6 (60') 170.8CID-2V	7 8	5 6 5 6 7 8 7 8																				
4	V-6 (60') '77 170.8CID-VV	7 8	8 7 8																				
4	IL-6 200CID-1V		5 6 7 8	5 6 5 6 5 6 7 7 7 7 8																			
5	IL-6 250CID-1V			5 6 7 8	5 6 5 6 5 6 7 8 7 7 8																		
6	V-8 302CID-2V		5 6 7 8	5 6 7 8	5 6 5 6 5 6 7 8 7 8 7 8	8 7 8																	
8	V-8 '77 302CID-VV		7 8	7 8	7 8 7 8 7 8 7 8	7 8																	
8	V-8 351CID-2V			5 6 7 8	5 6 7 8	5 6 7 8	5 6 5 6 5 6 7 8 7 8 7 8																
10	V-8 400CID-2V				5 6 5 6 5 6 7 8 7 8 7 8	5 6 7 8	5 6 5 6 5 6 7 8 7 8 7 8																
11	V-8 460CID-4V				5 6 5 6 5 6 7 8 7 8 7 8	5 6 7 8	5 6 5 6 5 6 7 8 7 8 7 8																

REVISED: 8/1/78 AC-CTP

NOTE:  
 1975 = 5  
 1976 = 6, ETC.  
 ( ) = PROJECTED  
 USAGE

5 6	YEAR SLOTS '75-'80
7 8	
9 0	

FIGURE 3-5. FORD CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-78

## 4. CHRYSLER CORPORATION

### 4.1 SUMMARY

Chrysler Corporation, the smallest of the domestic big three auto manufacturers, offers more engines, transmissions, and models than Ford Motor Company. This is primarily due to its affiliation with Mitsubishi of Japan; Chrysler sells Mitsubishi's Arrow, Colt, Sapporo, and Challenger models as captive imports. These models, along with their engines and transmissions, provide Chrysler with needed penetration in the small and sports car markets. Over the period 1975 through 1978 Chrysler used sixteen different engines or engine derivatives and eighteen transmissions (nine manual and nine automatic) on twenty-two different models. In 1978 alone, a total of fifteen engines and eleven transmissions (six manual and five automatic) were offered on sixteen models.

Only a small number of engine and transmission modifications are projected for future introduction by Chrysler. In 1979 the 360 CID V-8 will be the largest engine as the 400 and 440 CID V-8's are discontinued in conjunction with the introduction of new smaller full size vehicles. At this time Chrysler's lean burn system will be dropped in favor of a new electronic spark control system. A new induction manifold injection system and turbo-charger are expected for 1979 and 1980, respectively. Chrysler is developing a 225 CID prechamber diesel engine, derived from the well known slant six engine, which should be introduced in 1980. New domestic four-cylinder engines are due for introduction in the 1980's (to replace the current modified VW four) along with new fuel metering and injection systems. Also under development is a 225 CID six cylinder single chamber advanced technology diesel for possible introduction in the mid-1980's.

Chrysler was the first domestic auto manufacturer to introduce a new lock-up torque converter on many of their automatic transmissions for 1978, allowing an approximate 5% fuel economy improvement; the availability of this torque converter will be expanded to

more model and engine combinations in 1979 and later years. No four-speed automatic transmissions (or overdrive versions) are forecasted for use by Chrysler. See Volume I, Master Product Schedules, for a more detailed discussion of the product plans for Chrysler and the other auto manufacturers.

The detailed information worksheets (Engine-Transmission-Rear Axle Product Schedule) for Chrysler Corporation are found in Appendix C. The summary charts are described in Section 4.2 through 4.6 (Figures 4-1 through 4-5).

#### 4.2 ENGINES IN PRODUCTION (Figure 4-1)

This figure displays the production availability of all Chrysler engines from 1975 through 1979. Engine description includes: type, size (in CID), and fuel metering (number of carburetor barrels). Sixteen engines are listed for use during the period 1975 through 1979. Of these engines only five were new during this period: three 4-cylinder, one 6-cylinder, and one 8-cylinder engine. Two of the three new 4-cylinder engines were from Mitsubishi and the other was from VW for use in the Omni/Horizon. A 2-barrel version of the 225 CID slant 6 engine and a 4-barrel version of the 318 CID V-8 engine were also added. The 400 CID 2-barrel engine was discontinued in 1978 and the 400 and 440 CID 4-barrel engines were discontinued for 1979. Projected engine usage for 1979 is shown by dash lines; new engine introductions are marked by a bold outline in the appropriate year.

#### 4.3 TRANSMISSIONS IN PRODUCTION (Figure 4-2)

This chart depicts the transmission usage for Chrysler from 1975 through 1978. Bold outlining highlights the introduction year for new transmissions. The total number of transmissions listed is eighteen, with eleven of them in use in 1978 (six manual and five automatic). Codes are used on most of the automatic transmissions (named Torqueflite) to distinguish differences. All Chrysler automatic transmissions are currently three-speed; lock-up torque converters were available in 1978 on the A-904-LA, A-727 and A-999

models. Most automatic transmissions are new since 1976 (three in 1976, two in 1977, and one in 1978) but several were dropped in 1978.

Chrysler offers only a small number of manual transmissions. For domestic rear-drive vehicles only one three-speed and one four-speed (overdrive) manual are offered. The only five-speed manuals are from Mitsubishi; the Omni/Horizon used a VW four-speed manual transaxle. There is very little transmission switching by models from year to year by Chrysler due to the small number available. All Chrysler automatics are domestically produced with the exception of the Mitsubishi model produced in Japan.

#### 4.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 4-3)

This chart matches the different engines and transmissions in use from 1975 through 1978. Using the same format as GM (see Section 2.4), engine and transmission descriptions are consistent with those given in Figures 4-1 and 4-2 (Engines and Transmissions in Production).

As with Ford, Chrysler makes very few engine/transmission changes. Some minor changes of gear ratios has occurred with four-speed manual transmissions and some transmissions have been dropped, but no major changes have transpired. Chrysler does not have a domestic five-speed manual transmission and only offers a five-speed manual on captive imports produced by Mitsubishi. The 225 CID L-6 engine is the only engine using a three-speed manual transmission. The only manual transmissions offered with the 121.7 and 155.9 CID Mitsubishi engines have five-speeds. All other engines use a four-speed manual as standard equipment; it is optional with the 225 CID L-6. All engines have at least one automatic transmission available and some V-8's have two or more.

#### 4.5 AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY (Figure 4-4)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many combinations only one transmission type is offered. Using the same format as Ford (see Section 3.5), engine descriptions are consistent with those given in Figures 4-1 and 4-3.



From this data, several observations can be drawn. Manual transmissions are not used in any engine larger than the 318 CID 2-barrel. Manual transmissions are also not available with some smaller engine sizes on some models (Charger, Magnum, Cordoba, and all full size cars). Manual transmissions are generally available on the 318 CID 2-barrel V-8 engine and all four and six cylinder engines. Year to year changes in engine or transmission type for Chrysler models are not very common. Changes made in 1978 include the addition of the 360 CID engine to the full size Chrysler model and the addition of the 225, 360, and 400 CID engines to the Diplomat/LeBaron.

#### 4.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 4-5)

Using the same format as GM (see Section 2.6), this chart demonstrates that the trend at Chrysler (like Ford) is toward smaller engines and the introduction of new engines for specific new vehicles. From this chart it can be seen that the 318 CID V-8 4-barrel was introduced for the Magnum XE in 1978 and the 104.7 CID 4-cylinder engine was introduced for the Omni/Horizon also in 1978. The Mitsubishi models introduced in 1978 also came with their own 155.9 CID 4-cylinder engine. The trend towards smaller engines by Chrysler manifested itself recently with the addition of the 225 CID engine in the Diplomat/LeBaron and the dropping of the 400 CID 2-barrel engine in 1978. More changes will occur in 1979 when the remaining 400 CID and 440 CID engines are dropped and the new lighter full-sized R-body is introduced using smaller engines.



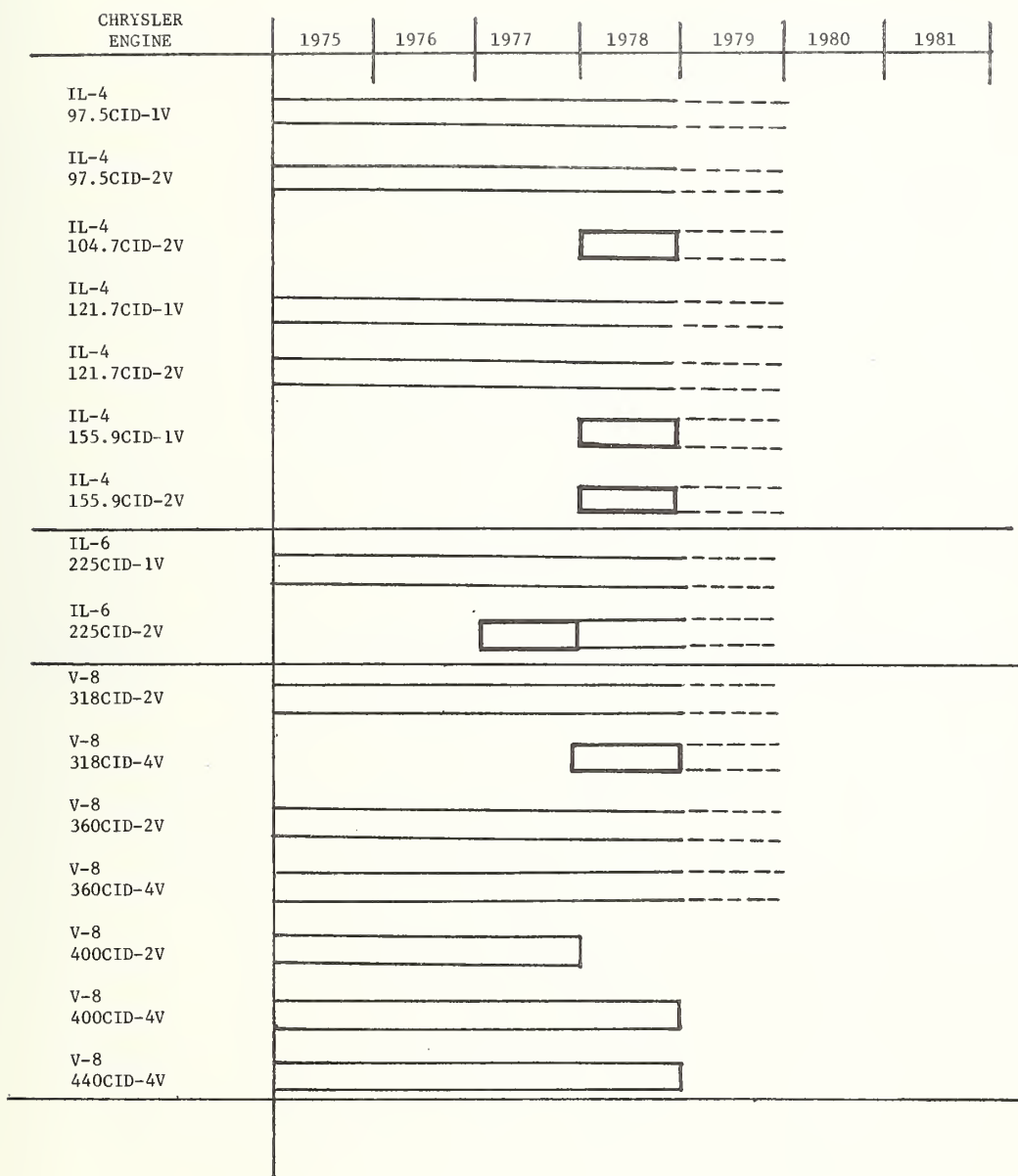


FIGURE 4-1. CHRYSLER ENGINES IN PRODUCTION, 1975-79

MANUFACTURER	FORWARD SPEEDS GEAR RATIO IN FIRST	TYPE	1975	1976	1977	1978	1979	1980	1981	1982
DAIKIN MFG. (MITSUBISHI)	3.37	5								
AISHIN SEIKI (MITSUBISHI)	3.22	5								
AISHIN SEIKI (MITSUBISHI)	3.52	4								
VOLKSWAGEN	3.45	4								
A-390	3.09	4								
A-390	3.09	4								
A-390	3.09	4								
A-390	3.08	3								
A-390	2.99	3								
(OMNI/HORIZON)	2.47	3								
A-904 (MITSUBISHI)	2.45	3								
TORQUEFLITE	2.45	3								
A-904-LA TORQUEFLITE	2.45	3								
A-904-LA TORQUEFLITE	2.45	3								
A-723 TORQUEFLITE	2.45	3								
A-727 TORQUEFLITE	2.45	3								
A-998 TORQUEFLITE	2.45	3								
A-999 TORQUEFLITE	2.45	3								

FIGURE 4-2. CHRYSLER TRANSMISSIONS IN PRODUCTION, 1975-78

ENGINE	MANUAL										AUTOMATIC																		
	5 SPEED					4 SPEED					3 SPEED					3 SPEED					3 SPEED								
	3.37	2.21	1.53	1.09	0.82	3.45	2.21	1.53	1.09	0.82	3.08	2.09	1.47	1.09	0.82	3.45	2.21	1.53	1.09	0.82	3.45	2.21	1.53	1.09	0.82	3.45	2.21	1.53	1.09
MANUFACTURER	Dodge					Chrysler					Chrysler					Chrysler					Chrysler								
ENGINE	7 8 7 8					7 8 7 8					7 8					7 8					7 8								
II-4 97.5CID-1V											7 8																		
II-4 97.5CID-2V	7 8 7 8					7 8					7 8																		
II-4 104.7CID-2V	8					8					8																		
II-4 111.7CID-1V	7 8					7 8					7 8																		
II-4 121.7CID-2V	7 8					7 8					7 8																		
II-4 155.9CID-1V	8					8					8																		
II-4 155.9CID-2V	8					8					8																		
II-4 225CID-1V	6 7 8 7 8					5 6 7 8					5 5					5 6 7 8													
II-6 235CID-2V	7 8					7 8					7 8					7 8													
V-8 318CID-2V	5 6 7 7 8					5 6 7 8					5 5					5 6 7 7 8													
V-8 318CID-4V																8													
V-8 360CID-2V											5					6 7 8 7 7 8													
V-8 360CID-4V											5					6 7 8 7 7 8													
V-8 400CID-2V											5					7					6 7								
V-8 400CID-4V											5					7 8					6 7 8								
V-8 440CID-1V											5					7 8 7					6 7 8 7								

YEAR  
7 8 | SLOCS  
9 D | 75-'80

1975 = S  
1976 = 6, ETC.  
( ) = PROJECTED  
USAGE

NOTE: In 1978 Models new lock-up auto transmission is used in:  
-All Federal models except 440CID V-8.  
-All California models except 440CID V-8 & 235CID II-6.  
-No high altitude models.

REF: User's Engine Update 11/11/77, P. 4.

FIGURE 4-3. CHRYSLER CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-78



ENGINES	SUBCOMPACT			COMPACT					INTERMEDIATE				FULL SIZE									
	ARROW	COLT	SWAMPORD '78	CHALLENGER '78	OMNI/HORIZON '78	ASPEX '78	IMPACT	PALFANT	VOLARE '76	MAJESTIC '78	CHARGER S.E.	CONQUANT	CORONA/RA	TEMPLEPAT '77	FURY	LEBRONN '77	STRATUS	CHRYSLER	CRAL FURY	STRAGO	ROYAL '76/80	
IL-6 97.5CID-1V	6 5 6 7 8 7 8		8 8																			
IL-6 97.5CID-2V	6 5 6 7 8 7 8		8 8																			
IL-6 '78 104.7CID-2V				8																		
IL-6 121.7CID-1V	6 5 6 7 8 7																					
IL-6 121.7CID-2V	6 5 6 7 8 7																					
IL-6 155.9CID-1V		8 8 8																				
IL-6 155.9CID-2V		8 8 8																				
IL-6 225CID-1V				6 5 6 7 8	5 6 7 8	5 6 7 8	6 7 8		5 5		5 6 7 8	8	5 6 7 8	8								
IL-6 '77 225CID-2V				7 8		7 8					8 7 8	8 7 8	8 7 8	8 7 8								
V-8 318CID-2V				6 5 6 7 8	5 6 7 8	5 6 7 8	6 7 8	5 6 5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8
V-8 '78 318CID-4V				8		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
V-8 360CID-2V				6 5 6 7 8		6 5 6 7 8	6 5 6 7 8	5 6 5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8
V-8 360CID-4V					5 6 5 6	5 6 5 6		5 6 5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8
V-8 400CID-2V								5 6 5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8
V-8 400CID-4V								5 6 5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7 8
V-8 440CID-4V																	5 6 5 6 7 8 7	5 6 5 6 7 8 7	5 6 5 6 7 8 7	5 6 5 6 7 8 7	5 6 5 6 7 8 7	5 6 5 6 7 8 7

5 6 YEAR  
7 8 SLOTS  
9 0 '75-'80  
1975 = 5  
1976 = 6  
( ) = PROJECTED  
USACF

FIGURE 4-5. CHRYSLER CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-78





## 5. AMERICAN MOTORS CORPORATION

### 5.1 SUMMARY

American Motors in recent years has had only four models on the market which, in 1978, used six engines and four transmissions (three manual and one automatic). For 1979 AMC is purchasing the Chrysler lock-up torque converter for use with Chrysler's automatic transmission and AMC's 304 CID V-8 engine. The intermediate size Matador is being dropped for 1979 and with it the 360 CID V-8 engine, which will make the 304 CID V-8 the largest engine used by AMC. In 1980 AMC intends to drop the 4-cylinder Audi engine currently used and purchase the Pontiac 151 4-cylinder engine in its place. The latter engine is currently available in several configurations and it is not known at this time which one or more versions AMC might use.

Capital is not available for AMC to operate extensive research and development facilities. As a result, it is highly dependent on outside suppliers for technological advances, especially in the engine/drivetrain area. AMC intends to purchase from other suppliers most of the technology it needs to meet the future emission and fuel economy standards, as exemplified by its purchase of the Chrysler lock-up torque converter and the Pontiac engine. Transversely mounted engines and transaxles may be purchased by AMC in the 1980's in order to introduce a front-wheel-drive mini car. See Volume I, Master Product Schedules, for a more detailed discussion of AMC's advanced product plans.

The detailed information worksheets (Engine-Transmission-Rear Axle Product Schedule) for American Motors are found in Appendix D. The summary charts are described in Sections 5.2 through 5.6 (Figures 5-1 through 5-5).

### 5.2 ENGINES IN PRODUCTION (Figure 5-1)

This figure displays the use of all AMC engines from 1975 through 1979. Engine description includes: type, size (in CID), and fuel metering (number of carburetor barrels). Of the eight engines listed for use during this period only the Audi 121 CID

4-cylinder engine was new. In 1975, the 401 CID V-8 was dropped; in 1976 the 360 CID 4-barrel V-8 was dropped. The 360 CID 2-barrel V-8 engine was dropped at the end of the 1978 model year along with the Matador. The Page Numbers shown next to the engine descriptions refer to the worksheets in Appendix D, Figure D-1.

### 5.3 TRANSMISSIONS IN PRODUCTION (Figure 5-2)

This chart depicts the transmission usage for AMC from 1975 through 1978. Bold outlining highlights the introduction year for new transmissions. Eight manual transmissions are listed but only three of them were used in 1978 along with one automatic transmission. The automatic transmission (named Torque-Command) is purchased from Chrysler and will be fitted with Chrysler's lock-up torque converter for 1979 when used with AMC's 304 CID V-8 engine. Four new manual transmissions have been introduced since 1976. These have generally been replacements for previously discontinued transmissions. One four-speed manual was specifically introduced in 1978 for use with the 121 CID 4-cylinder Audi engine. In addition, only one other four speed and one three speed manual were available in 1978. The varied list of transmission manufacturers attests to the large number of suppliers used by AMC over the years.

### 5.4 CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS (Figure 5-3)

This chart matches the different engines and transmissions in use from 1975 through 1978. Using the same format as GM (see Section 2.4), engine and transmission descriptions are consistent with those given in Figures 5-1 and 5-2 (Engines and Transmissions in Production).

The primary point brought out by this chart is that AMC has only one automatic transmission which it uses for all of its engines. As a result, this one automatic cannot be efficiently utilized to accommodate the varying load requirements of all its engines. Additional weight could be removed from selected models (and fuel economy increased) if more automatic transmissions were available which more closely matched the requirements of each engine/model combination.

## 5.5 AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY (Figure 5-4)

This is a convenient summary of the availability of manual and automatic transmissions for each model/engine combination recognizing that in many combinations only one transmission type is offered. Using the same format as Ford (see Section 3.5) engine descriptions are consistent with those given in Figures 5-1 and 5-3.

Several observations can be made from this data. The use of manual transmissions with V-8 engines was discontinued in 1977 making the automatic transmission the only one available with V-8 engines. The use of a manual transmission with the 6-cylinder engine on the Matador was also discontinued in 1977 so the Matador could only be purchased with an automatic transmission. These changes were made primarily due to emission requirements (see discussion in Section 3.5). In 1978 the Pacer was offered with a 304 CID V-8 engine and automatic transmission for the first time. The new 121 CID 4-cylinder Audi engine was added to the Gremlin in 1977 with both automatic and manual transmissions as a means of boosting fuel economy. The Concord is scheduled to receive this engine in 1979, also to help fuel economy.

## 5.6 CALENDAR OF MODEL/ENGINE COMBINATIONS (Figure 5-5)

Using the same format as GM (see Section 2.6), this chart illustrates that AMC is following a trend to the use of smaller engines as a means of improving their corporate average fuel economy (CAFE). The primary examples of this are the discontinuance of the 304 CID V-8 on the Gremlin in 1976 and the addition of the 121 CID 4-cylinder engine in 1977.

AMERICAN MOTORS		1975	1976	1977	1978	1979	1980	1981
PG	ENGINE							
1.	IL-4 121CID-2V		NEW					
	IL-6 232CID-1V							
3.	IL-6 258CID-1V							
4.	IL-6 258CID-2V							
6.	V-8 304CID-2V							
	V-8 360CID-2V							
7.	V-8 360CID-4V							
	V-8 401CID-4V							

Revised: 8/1/78 AC-CTP

FIGURE 5-1. AMERICAN MOTORS ENGINES IN PRODUCTION, 1975-79

AMERICAN MOTORS

GEAR RATIO IN FIRST  
FORWARD SPEEDS  
MANUFACTURER  
AND LOCATION

	TYPE	1975	1976	1977	1978	1979	1980	1981	1982
BORG & BECK	3.65 4								
BORG & BECK	3.50 4								
LAYCOCK	2.99 4								
TREMEC	3.99 3								
WARNER GEAR	3.1 3								
AUTOMOTIVE PROD.	2.99 3								
LAYCOCK	2.99 3								
TREMEC	2.99 3								
TORQUE-COMMAND									
CHRYSLER	2.45 3								

REVISED: 8/17/78 AC-CTP

FIGURE 5-2. AMERICAN MOTORS TRANSMISSIONS IN PRODUCTION, 1975-78

AMERICAN MOTORS 1975-1980

ENGINE	MANUAL										AUTO
	4	4	4	4	3	3	3	3	3	3	
FORWARD SPEEDS	4	4	4	4	3	3	3	3	3	3	3
GEAR RATIO IN FIRST	3.65	3.50	2.999	3.99	3.1	2.99	2.99	2.99	2.99	2.45	
MANUFACTURER LOCATION	BORG & BECK	LAYCOCK	TREMEC	WARNER GEAR	AUTOMOTIVE PROD.	LAYCOCK	TREMEC	TORQUE COMMAND	CHRYSLER		
ENGINE	8	7	8								
IL-4 121CID-2V										7	8
IL-6 232CID-1V		7	8	5	6	7	8	6	5	6	5
IL-6 258CID-1V		8	5	5	6	7		6	6	5	6
IL-6 258CID-2V		7	8		6	7		6	6	7	8
V-8 304CID-2V									5	6	5
V-8 360CID-2V										7	8
V-8 360CID-4V										5	6
V-8 401CID-4V										5	

5	6
7	8
9	0

 YEAR SLOTS '75-'80  
 1975 = 5  
 1976 = 6, ETC.  
 ( ) = PROJECTED USAGE

Revised: 8/1/78 AC-CTP

FIGURE 5-3. AMERICAN MOTORS CALENDAR OF ENGINE/TRANSMISSION COMBINATIONS, 1975-78



AMERICAN MOTORS 1975-1978

MODEL ENGINE C. I. D. CARB. BBL.	1975			1976			1977			1978					
	IL-6 232 1V	IL-6 258 2V	V-8 304 2V	V-8 360 2V	V-8 360 4V	IL-6 232 1V	IL-6 258 1V	IL-6 258 2V	V-8 304 2V	V-8 360 2V	IL-6 232 1V	IL-6 258 1V	IL-6 258 2V	V-8 304 2V	V-8 360 2V
-SUBCOMPACT- GREMLIN	A/M	A/M	A/M			A/M	A/M	A/M			A/M	A/M	A/M		
-COMPACT- HORNET (CONCORD '78)	A/M	A/M	A/M			A/M	A/M	A/M			A/M	A/M	A/M	A	
FAZER '75	A/M	A/M	A			A/M	A/M	A/M			A/M	A/M	A/M	A	
-INTERMEDIATE- MATADOR	A/M	A/M	A	A	A	A/M								A	

Revised: 8/1/78 AC-GTP

A = AUTOMATIC TRANSMISSION  
M = MANUAL TRANSMISSION

FIGURE 5-4. AMERICAN MOTORS AUTOMATIC VS. MANUAL TRANSMISSION AVAILABILITY, 1975-78

AMERICAN MOTORS 1975-1980

ENGINES		VEHICLES			
		CREMLIN	HORNET	PACER '75	MATADOR
PG					
1	IL-4 '77 121CID-2V	7 8			
	IL-6 232CID-1V	5 6 7 8	5 6 7 8	5 6 7 8	
3	IL-6 258CID-1V	5 6 7 8	5 6 7 8	5 6 7 8	5 6 7
4	IL-6 258CID-2V		6 6 7 8	6 6 7 8	8
6	V-8 304CID-2V	5 6 7 8	5 6 7 8	8 7	5 6
	V-8 360CID-2V				5 6 7 8
7	V-8 360CID-4V				5 6
	V-8 401CID-4V				5

1975 = 5  
1976 = 6, ETC.  
( ) = PROJECTED USAGE

5	6
7	8
9	0

} YEAR SLOTS '75-'80

Revised: 8/1/78 AC-CTP

FIGURE 5-5. AMERICAN MOTORS CALENDAR OF MODEL/ENGINE COMBINATIONS, 1975-78

APPENDIX A  
GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE  
PRODUCT SCHEDULE

TABLE A-1. NOTES FOR GENERAL MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULE

Footnotes:

- (a) Not available in California
- (b) Not available in high altitude
- (c) California only
- (d) High altitude only
- (e) Manufacturing option
- (f) Except station wagons
- (g) Station wagons only
- (h) Police option
- (i) Trailer option
- (R) Reverse

General Notes:

- (1) All axle ratios may not be available with air conditioning and some ratios are only available with air conditioning.
- (2) Some engine-driveline combinations may not be available with all series of each model.
- (3) Not all axle ratios are available with Positraction.

GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE
11-cv* 55CID-1V (1.6L) LXJ (CHEVY)												
(MANUAL)												
(AUTO)												
11-cv* 95-cvD-1; (1.6L) LXJ (CHEVY)												
(MANUAL)												
(AUTO)												

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80

ENGINE TYPE AND SIZE (TRANS., TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE	DRIVELINE RATIOS TRANSMISSION	AXLE
L15 CONT.												
(AUTO)												
T1-6* 97-6CID-1V (1-64) 135 (CHEV) (HIGH OUTPUT)												
(MANUAL)												
(AUTO)												

THM 180  
 3- 2.40 (S)  
 SPEED 1.48 3.70  
 1.00  
 1.92 (R) 4.11  
 CHEVETTE

BORG & BECK  
 4- 3.75 3.70  
 SPEED 2.16 4.11  
 (b) 1.38  
 1.60  
 3.82 (R)

THM 180  
 3- 2.40 3.70  
 SPEED 1.48 4.11  
 (S) 1.00  
 1.92 (R)

\*NEW IN 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVE- LINE	RATIOS	DRIVE- LINE	RATIOS	DRIVE- LINE	RATIOS	DRIVE- LINE	RATIOS	DRIVE- LINE	RATIOS	DRIVE- LINE	RATIOS
	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE
IL-4* 110.8CID-2V (1.80) (15/22)												
					DAIKIN							
(MANUAL)												
					4- SPEED	3.51 2.18 1.42 1.00 3.83(R)	3.583	4- SPEED	3.51 2.18 1.42 1.00 3.83(R)	3.583		
(MANUAL)												
					5- SPEED	3.51 2.18 1.42 1.00 0.86 3.78(R)	3.583	5- SPEED	3.51 2.18 1.42 1.00 0.86 3.78(R)	3.308		
(AUTO)												
					TURBO-HYDRAULIC 200							
IL-4** 122CID-FI (2.01) LY3 (CHEVY)												
					3- SPEED	2.74 1.57 1.00 2.07(R)	3.583	3- SPEED	2.74 1.57 1.00 2.07(R)	3.583		
(MANUAL)												
					CHEVROLET							
(MANUAL)												
					4- SPEED	3.11 1.67 1.00 3.11(R)						
(MANUAL)												
					CHEVROLET							
NEW IN 1976 *DROPPED IN 1977												
					5- SPEED	3.61 2.04 1.40 1.00 0.80 3.36(R)						

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



ENGINE TYPE AND SIZE (TRANS. TYPE)	1975			1976			1977			1978			1979			1980				
	DRIVE/TRANS	RATIOS	CAR MODELS	DRIVE/TRANS	RATIOS	CAR MODELS	DRIVE/TRANS	RATIOS	CAR MODELS	DRIVE/TRANS	RATIOS	CAR MODELS	DRIVE/TRANS	RATIOS	CAR MODELS	DRIVE/TRANS	RATIOS	CAR MODELS		
TL-4* 130CIV-IV (G) (1) 113 (CHEVY)	3- SPEED 1.84 1.00 (a) 3.22(R)	2.92	VEGA	3- SPEED 1.84 1.00 (a) 3.22(R)	2.92	VEGA	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	
		3.11	ASTRE		3.11	VEGA MONZA ASTRE SUBBIBO														
(MANUAL)	4- SPEED 1.70 1.00 (a) 3.11(R)	2.92	VEGA	4- SPEED 1.70 1.00 (a) 3.11(R)	3.75	VEGA	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)
		3.11	ASTRE		2.92	VEGA MONZA ASTRE SUBBIBO														
(MANUAL)	3- SPEED 1.52 1.00 (a) 1.93(R)	2.92	VEGA	3- SPEED 1.52 1.00 (a) 1.93(R)	2.53	VEGA	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)
(AUTO)		3.11	ASTRE		2.92	VEGA MONZA ASTRE SUBBIBO														
TL-4** 130CIV-2V (G) (1) 111 (CHEVY)	3- SPEED 1.84 1.00 (a) 3.22(R)	2.92	VEGA	3- SPEED 1.84 1.00 (a) 3.22(R)	3.11	VEGA	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)
		3.11	ASTRE		2.92	VEGA MONZA ASTRE														
(MANUAL)																				

\*DROPPED IN 1977  
\*\*DROPPED IN 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

REVISED: 8/1/78 AG-CPT

GENERAL COMMENTS	MODEL YEAR											
	1975		1976		1977		1978		1979		1980	
	DRIVE LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE LINE RATIOS TRANSMISSION AXLE	CAR MODELS
(L) CONT.												
(MANUAL)	4- 3.11 SPEED 2.20 1.47 3.11(R)	VEGA ASTRE MONZA ASTRE (c)	CHEVROLET 4- 3.75 SPEED 2.16 1.38 3.82(R)	2.92 VEGA 2.92 MONZA 2.93 ASTRE 3.82(R)		4- 3.11 SPEED 2.20 1.47 3.11(R)	VEGA ASTRE MONZA SUNBERG (e)	(DISCONTINUED)				
(MANUAL)			CHEVROLET 3- 3.41 SPEED 2.08 2.42 1.00 0.80 3.36(R)	2.93 VEGA 2.92 MONZA 2.93 ASTRE 3.36(R)		3- 3.40 SPEED 2.08 2.42 1.00 0.80 3.36(R)	VEGA MONZA ASTRE (c) SUNBERG	(DISCONTINUED)				
(CAT)	4- 2.53 SPEED 1.32 1.00 1.91(G)	VEGA ASTRE MONZA ASTRE (c)	TURBO HYDRAMATIC 350 3- 2.53 SPEED 1.00 1.91(R)	2.93 VEGA 2.92 MONZA 2.92 ASTRE 3.42 ASTRE 2.92		3- 2.53 SPEED 1.32 1.00 1.91(R)	VEGA MONZA ASTRE MONZA (d)	(DISCONTINUED)				
(MANUAL)			CHEVROLET 3- 3.11 SPEED 1.84 1.00 3.22(R)	3.42 SUNBERG 3.22(R)				(DISCONTINUED)				

TABLE 5

DRIVE LINE RATIOS  
(TRANS. TYPE)

DRIVE LINE RATIOS  
(GHEV)

TABLE IN 1976 -  
RECORDED IN 1977

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



GENERAL MOTORS  
ENGINE  
TYPE AND SIZE  
(TRANS. TYPE)

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MODEL YEAR  
REVISED: 8/1/78 AC-CTP

	1975		1976		1977		1978		1979		1980	
	DRIVE- LINE RATIO TRANSMISSION	AXLE	DRIVE- LINE RATIO TRANSMISSION	AXLE	DRIVE- LINE RATIO TRANSMISSION	AXLE	DRIVE- LINE RATIO TRANSMISSION	AXLE	DRIVE- LINE RATIO TRANSMISSION	AXLE	DRIVE- LINE RATIO TRANSMISSION	AXLE
LX6 CONT. (MANUAL)					CHEVROLET 5- SPEED 3.40 3.42 2.08 1.39 (a) 1.39 (b) 0.80 3.36(R)	ASTRE SUNBIRD VENTURA	3.23 2.73 3.23	3.23 2.73 3.23				
(AUTO)					TURBO-HYDRAMATIC 200 3- SPEED 2.74 1.57 1.00 2.07(R)	(a) (b) ASTRE (b) SUNBIRD (c) VENTURA 3.23 3.42 (a) (b)	3.42 2.73 2.73 3.08	3.42 2.73 3.08				
(AUTO)					TRM 180 3- SPEED 2.40 1.48 1.00 1.92(R)		2.73 3.08	2.73 3.08				
(M 10)					TURBO-HYDRAMATIC 200 3- SPEED 2.74 1.57 1.00 2.07(R)		2.73 3.08	2.73 3.08				
(MANUAL)					CHEVROLET 4- SPEED 3.50 2.48 1.66 1.50(R)		2.93	2.93				

TL-48  
LX6 CONT.  
LX6 CONT.  
LX6 CONT.

(M 10)

(MANUAL)

\*MER FOR 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS., TYPE)	1975			1976			1977			1978			1979			1980			
	DRIVE- LINE RATIOS	TRANSMISSION	AXLE	DRIVE- LINE RATIOS	TRANSMISSION	AXLE	DRIVE- LINE RATIOS	TRANSMISSION	AXLE	DRIVE- LINE RATIOS	TRANSMISSION	AXLE	DRIVE- LINE RATIOS	TRANSMISSION	AXLE	DRIVE- LINE RATIOS	TRANSMISSION	AXLE	
IL-4 (2.5I) (PONTIAC) HIGH PERFORMANCE																			
IL-4 (2.5I) (PONTIAC) TURBO																			
IL-4 (2.5I) (PONTIAC) LIGHT WEIGHT																			
IL-4 (2.5I) (PONTIAC) TRANSVERSE																			
60° V-6 (2.8L) (CHEV) TRANSVERSE																			
V-6 196CID-2V (3.2L) L69 (BUICK)																			
(MANUAL)																			
*NEW IN 1978																			

NEW FOR MID-YEAR

NEW TURBO

NEW FOR MID-YEAR

CHEVROLET

SPEED 3.50  
1.89  
(3)(b) 1.00  
3.02(R)

CENTURY  
REGAL

NEW TRANSVERSE FOR V-BODIES,  
THEM 125 AUTO TRANSAXLE  
& MANUAL VERSIONS

NEW FOR V-BODIES WITH  
THEM 125 AUTO TRANSAXLE  
& MANUAL VERSIONS

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVE/LINE RATIO	TRANSMISSION AXLE	DRIVE/LINE RATIO	TRANSMISSION AXLE	DRIVE/LINE RATIO	TRANSMISSION AXLE	DRIVE/LINE RATIO	TRANSMISSION AXLE	DRIVE/LINE RATIO	TRANSMISSION AXLE	DRIVE/LINE RATIO	TRANSMISSION AXLE
V-6* (CONT) 196CID-2V (3.2L) L35 (BUICK)							CHEVROLET					
							4- SPEED 3.50 (b) 2.48 (a) 1.66 1.00 3.50(R)					
								2.56				
								MONZA				
(MANUAL)							CHEVROLET					
							5- SPEED 3.40 (a) 1.39 (b) 1.00 1.00 3.36(R)					
								2.73				
								MONZA				
(MANUAL)							THM 350					
							3- SPEED 3.52 (a) 1.52 (b) 1.00 1.93(R)					
								2.73				
								CENTURY MALIBU MONZA				
(AUTO)							CHEVROLET					
							3- SPEED 3.50 (a) 1.69 (b) 1.00 3.02(R)					
								2.73				
								MALIBU				
(MANUAL)												

V-6\* (CONT)  
196CID-2V  
(3.2L)  
L35 (BUICK)

V-6\*  
196CID-2V  
(3.3L)  
L25 (CHEVY)

\*NEW IN 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



ENGINE TYPE AND SIZE (TRANS - DRIVE)	1975						1976						1977						1978						1979						1980											
	DRIVELINE RATIOS			CAR MODELS			DRIVELINE RATIOS			CAR MODELS			DRIVELINE RATIOS			CAR MODELS			DRIVELINE RATIOS			CAR MODELS			DRIVELINE RATIOS			CAR MODELS			DRIVELINE RATIOS			CAR MODELS								
	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL	TRANSMISSION	AXLE	MODEL												
L26 (GEO) (AUTO)																THRU 200			THRU 200																							
	3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)			THRU 200 3-SPEED 2.74 (a) 1.57 (b) 1.00 2.07 (R)					
L36 (BUICK) (AUTO)																																										
	3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)			THRU 350 3-SPEED 2.52 (a) 1.52 (b) 1.00 1.93 (R)					
L36 (BUICK) (MANUAL)																																										
	3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK			3-SPEED 3.11 1.86 (a) 1.57 3.22 (R)			CENTURY (F) SKYLARK		
L36 (BUICK) (MANUAL)																																										
	4-SPEED 3.11 2.20 1.47 1.00 3.11 (R)			SKYHAWK STARFIRE			4-SPEED 3.11 2.20 1.47 1.00 3.11 (R)			SKYHAWK SUBBIRD STARFIRE			4-SPEED 3.11 2.20 1.47 1.00 3.11 (R)			SKYHAWK (b) 2.93 2.56			SKYHAWK (b) 2.93 2.56			SKYHAWK (b) 2.93 2.56			SKYHAWK (b) 2.93 2.56			SKYHAWK (b) 2.93 2.56			SKYHAWK (b) 2.93 2.56			SKYHAWK (b) 2.93 2.56			SKYHAWK (b) 2.93 2.56					

\*DROPPED IN 1978, SEE 15 1975

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

1975	1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS
LDT (CONT) (MANUAL)		CHEVROLET	5-SPEED 3.10 1.89 (a) 1.27 1.00 0.84 3.06 (R)	SKYHAWK SUNBIRD	5-SPEED 3.08 3.10 1.89 1.27 1.00 0.84 3.06 (R)	(DISCONTINUED)				
		CHEVROLET	5-SPEED 3.40 2.08 1.39 1.00 (a) 0.80 3.36 (R)	CHEVROLET	5-SPEED 3.40 2.56 2.93 2.56 2.93	(DISCONTINUED)				
LDT (CONT) (MANUAL)		TRUCK	3-SPEED 2.52 1.52 1.00 1.93 (R)	CENTURY (E) SKYHAWK SUNBIRD STARFIRE	3-SPEED 2.52 1.52 1.00 1.93 (R)	(DISCONTINUED)				
		TRUCK	3-SPEED 2.73 1.52 1.00 1.93 (R)	CENTURY (E) LESABRE (E) SKYHAWK SUNBIRD STARFIRE	3-SPEED 2.73 1.52 1.00 1.93 (R)	(DISCONTINUED)				
LDT (CONT) (AUTOMATIC)		CHEVROLET	3-SPEED 2.52 1.52 1.00 1.93 (R)	CENTURY (E) LESABRE (E) SKYHAWK SUNBIRD STARFIRE	3-SPEED 2.52 1.52 1.00 1.93 (R)	(DISCONTINUED)				
		CHEVROLET	3-SPEED 2.73 1.52 1.00 1.93 (R)	CENTURY (E) LESABRE (E) SKYHAWK SUNBIRD STARFIRE	3-SPEED 2.73 1.52 1.00 1.93 (R)	(DISCONTINUED)				

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE (TRANS. TYPE)	MODEL YEAR											
	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS
	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE
LD7 (CONT)	(AUTO)		3-SPEED 74 1.57 2.93 1.00 2.07 (R)	TRV 200 2.56 SKYHAWK 2.93 3.23 DELTA 88 (F) 2.56 OMEGA 2.56 STARETRE	(DISCONTINUED)							
(EVEN FIRING)	(MANUAL)											
V-6 231C10-2V 1.8 (BUICK) LD3 (BUICK)	(MANUAL)											
	(MANUAL)											
	(MANUAL)											
	(MANUAL)											
	(MANUAL)											

\*NEW IN 1978 (RUNNING CHANGE END OF 1977)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS., TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS
(MANUAL)												
(MANUAL)												
(AUTO)												

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

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MODEL YEAR

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GENERAL MOTORS FIVE YEAR J.P. A.S. SIZE (I.R.V.S. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIO TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIO TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIO TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIO TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIO TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIO TRANSMISSION AXLE	CAR MODELS
LDS (CONV)							TRM 200					
							3-SPEED 2.74 1.57 1.00 2.07(R)					
							2.73 2.72 (b) 3.23 (a, b) 3.23 (b) 3.23 (b) 3.23 (b) 3.23 (b) 3.23 (b) 3.23 (b) 3.23 (b)					
							VALI(B)(C) REXANS (E) CENTURY (G) DELTA 88 (I) CULTESS CENTURY (b) (d)					
(AUTO)							TRM 350					
							3-SPEED 2.52 (a) 1.52 (b) 1.00 1.9 (R)					
							2.73 2.56 3.06 RECAL LESABRE (F)					
(AUTO)							TRM 350					
							3-SPEED 2.52 (a) 1.52 (b) 1.00 1.9 (R)					
							2.73 2.56 3.06 RECAL LESABRE (F)					

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS., TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE TRANSMISSION	CAR MODELS AXLE	DRIVELINE TRANSMISSION	CAR MODELS AXLE	DRIVELINE TRANSMISSION	CAR MODELS AXLE	DRIVELINE TRANSMISSION	CAR MODELS AXLE	DRIVELINE TRANSMISSION	CAR MODELS AXLE	DRIVELINE TRANSMISSION	CAR MODELS AXLE
L-6 250C10-1V (4-1L, L22 (CHEVY)	3-SPEED	CHEVROLET	3.08	(DISCONTINUED)	3-SPEED	CHEVROLET	(DISCONTINUED)	3-SPEED	3.50	CHEVROLET	3.50	CHEVROLET
		FIREBIRD LEMAN(F)	3.08		3-SPEED	CHEVROLET		3-SPEED	(a) 1.89 (b) 1.00 3.62(R)			
(MANUAL)	3-SPEED	2.85			3.11	CHEVROLET						
		1.84			1.86	CHEVROLET						
		1.68			1.92	CHEVROLET						
		(a) 1.00			3.22(R)	CHEVROLET						
		2.95(R)			3.22(R)	CHEVROLET						
		3.11			3.11	CHEVROLET						
		2.73			1.86	CHEVROLET						
		3.08			3.08	CHEVROLET						
(MANUAL)	3-SPEED	2.73			3.11	CHEVROLET						
		3.08			1.86	CHEVROLET						
		(a) 3.08			1.92	CHEVROLET						
		2.73			3.22(R)	CHEVROLET						
		(a) 3.08			3.22(R)	CHEVROLET						
		(b) 3.08			3.11	CHEVROLET						
		2.73			1.86	CHEVROLET						
		3.08			3.08	CHEVROLET						
		(a) 3.08			3.22(R)	CHEVROLET						
		(d) 3.08			3.22(R)	CHEVROLET						
(MANUAL)	3-SPEED	2.73			3.11	CHEVROLET						
		3.08			1.86	CHEVROLET						
		2.73			1.92	CHEVROLET						
		3.08			3.22(R)	CHEVROLET						

L-6  
250C10-1V  
(4-1L,  
L22 (CHEVY)

(MANUAL)

(MANUAL)

(MANUAL)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVE/TRANS	AXLE	DRIVE/TRANS	AXLE	DRIVE/TRANS	AXLE	DRIVE/TRANS	AXLE	DRIVE/TRANS	AXLE	DRIVE/TRANS	AXLE
(AUTO)	3-SPEED 2.52 1.52 1.84 1.93(R)	2.73 OMEGA APOLLO FERRARD VENTURA	3-SPEED 2.52 1.52 1.84 1.93(R)	2.73 CAMARO (6) 3.08 GD (4.15) 3.60	3-SPEED 2.52 1.52 1.84 1.93(R)	2.73 CAMARO (6) 3.08 CHEVROLET(L) NOVA	3-SPEED 2.52 1.52 1.84 1.93(R)	2.73 CAMARO (6) 3.08 CHEVROLET(L) NOVA	3-SPEED 2.52 1.52 1.84 1.93(R)	2.73 CAMARO (6) 3.08 CHEVROLET(L) NOVA		
(AUTO)		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		
(AUTO)		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		
(MANUAL)	3-SPEED 3.11 1.84 3.22(R)	2.73 OMEGA VENTURA(a)	3-SPEED 3.11 1.84 3.22(R)	3.08 LEMAN(S) (F) VENTURA	CHEVROLET	3-SPEED 3.11 1.84 3.22(R)	3.08 LEMAN(S) (F) VENTURA	CHEVROLET	3-SPEED 3.11 1.84 3.22(R)	3.08 LEMAN(S) (F) VENTURA		
(MANUAL)		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		
(MANUAL)		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		2.73 CAMARO (6) 3.08 CHEVRELLE(L) LEMAN(S) (F) CUTLASS		

DIESEL V-8  
 260CID  
 (4.3L)  
 OLDSMOBILE  
 V-8  
 260CID-2V  
 (4.3L)  
 OLDSMOBILE

NEW DIESEL

\*NEW IN 1975

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS., TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVE SHAFT RATIO	CAR MODEL	DRIVE SHAFT RATIO	CAR MODEL	DRIVE SHAFT RATIO	CAR MODEL	DRIVE SHAFT RATIO	CAR MODEL	DRIVE SHAFT RATIO	CAR MODEL	DRIVE SHAFT RATIO	CAR MODEL
V8 (CONT) (MANUAL)			CHEVROLET									
	3- 2.52	2.56	3- 3.41	(a)	3- 3.10	CHEVROLET	3- 3.40					
	3- 1.52		SPEED 1.40	LEMAN'S (f)	3- 1.27		(a)					
	1.00		1.00	VENTURA	1.00		(b)					
	1.93(R)	2.73	0.80		0.84		3- 3.06(R)					
			2.36(R)		3.06(R)							
(MANUAL)												
(AUTO)												
	3- 2.52	2.56	TRIM 350		3- 2.52							
	3- 1.52		(c)		2.56							
	1.00		SKYLARK		SPEED 1.52							
	1.93(R)	2.73	OMEGA		1.00							
					1.91(R)							
	(a)				1.91(R)							
	2.56	VENTURA			2.73							
	(g)				3.08							
	2.73				2.56							
					2.73							
					2.73							
(AUTO)												
V8 (CONT) (MANUAL)												
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V8 (CONT) (MANUAL)												
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GENERAL MOTORS TYPE AND SIZE (GRAND PRIX)	1975		1976		1977		1978		1979		1980	
	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE
L27 (CONT)												
(AUTO)												
(AUTO)												
L37 (PONTIAC)												
(AUTO)												
L37 (PONTIAC)												
(AUTO)												
L37 (PONTIAC)												
(AUTO)												
L37 (PONTIAC)												
(AUTO)												

L27 (CONT)

(AUTO)

(AUTO)

L37 (PONTIAC)

(AUTO)

L37 (PONTIAC)

(AUTO)

L37 (PONTIAC)

(AUTO)

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FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

\*NEW IN 1978  
\*\*NEW IN 1976

ENGINE TYPE AND SIZE (TRANS. TYPE)	MODEL YEAR																	
	1975			1976			1977			1978			1979			1980		
	DRIVELINE RATIOS TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION	AXLE	CAR MODELS			
LG3 (CORV) (MANUAL)																		
(AUTO)																		

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

GENERAL MOTORS  
ENGINE  
TYPE AND SIZE  
(TRANS., TYPE)

GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS., TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE
LG3 CONF (AUTO)					TRM 200 3 - 2.74 SPEED 1.57 1.00 2.07(R) 2.56 (a) 2.56 (b)	NOVA 2.56 (b) CHEVROLET MONZA 2.56 (c) 2.56 (d) VENTURA 2.56 (e) OMEGA 2.56						
LG4 (CHEVY) (AUTO)								TRM 200 3 - SPEED 2.74 1.57 (a) 1.00 (b) 2.07(R)				
								TRM 350 3 - SPEED 2.29 2.41 (a) 1.00 (b) 1.93(R) 2.29 2.73				

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

\*NEW IN 1978



MODEL YEAR

GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS. TYPE)	1975				1976				1977				1978				1979				1980																		
	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS															
V-8 350CID-2V (5.7 / ) L57 (BUICK)  (AUTO)	3- SPEED 2.52 1.52 1.00 1.93(R)			CENTURY (1) APOLLO SKYLARK OMEGA VENTURA	THM 350 3- SPEED 2.52 1.52 1.00 1.93(R)			SKYLARK CENTURY (1) LUCERNA OMEGA		3- SPEED 2.52 1.52 1.00 1.93(R)			(DISCONTINUED)																										
V-8 350CID-4T (5.7 / ) L77 (BUICK)  (AUTO)	3- SPEED 2.52 1.52 1.00 1.93(R)			CENTURY (1) APOLLO SKYLARK OMEGA VENTURA CENTURY (6)	3- SPEED 2.52 1.52 1.00 1.93(R)			CENTURY (1) CENTURY (6) LESABRE (F) SKYLARK LUCERNA OMEGA	THM 350 3- SPEED 2.52 1.52 1.00 1.93(R)				2.41 2.73 3.08 2.73 3.23				2.52 1.52 1.00 1.93(R)			3- SPEED 2.52 1.52 1.00 1.93(R)																			
V-8 350CID-2V (5.7 / ) L65 (CHEVY)  (MANUAL)	3- SPEED 2.85 1.68 1.00 2.95(R)	(CHEVROLET)		CAMARO MONTE CARLO NOVA CHEVILLE (f)	(DISCONTINUED)																																		
(AUTO)	3- SPEED 2.52 1.52 1.00 1.93(R)			CHEVILLE (f) CAMARO MONTE CARLO NOVA CHEVY (f)	THM 350 3- SPEED 2.52 1.52 1.00 1.93(R)			CHEVILLE MONTE CARLO MONTE CARLO NOVA CHEVROLET	THM 350 3- SPEED 2.52 1.52 1.00 1.93(R)				(DISCONTINUED)																										

8 (REVISED IN 1977)

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

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GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS. TYPE)	1975				1976				1977				1978				1979				1980										
	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO	DRIVE- LINE RATIO			
V-8 350CID-4V (5.7 L) LN 1(CHEVY) (MANUAL)	3- SPEED	2.85 1.68 1.00 (c) 2.95(R)	2.73 2.56	CHEVROLET	(DISCONTINUED)																										
	4- SPEED	2.54 1.80 1.44 1.00 2.58(R)	3.08	CANARO NOVA	(c) 3.08 3.08 2.85(R)	CANARO NOVA																									
(MANUAL)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										
(AUTO)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										
(AUTO)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										
(AUTO)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										
(AUTO)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										
(AUTO)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										
(AUTO)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										
(AUTO)	3- SPEED	2.52 1.52 1.00 1.93(R)	3.08 2.56 2.73 (c) 2.56	CANARO NOVA CHEVELLE (f)	(b) (d) (c) (c) 2.73(R)	CANARO NOVA CHEVELLE (f)																									
	4- SPEED	2.85 2.02 1.35 1.00 2.85(R)	3.08	CHEVROLET	CHEVROLET																										

\*NEW IN 1977

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980			
	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE		
V-8 * 350CID-4V (5.7 ℓ) LM1/228 (CHEVY)	THM 400 3- 2.48 SPEED 1.48 1.00 2.08 (R)		(DISCONTINUED)		CHEVROLET 4- 2.64 SPEED 1.75 1.34 (a) 1.34 (b) 1.00 2.55 (R)		CAMARO 3- 3.73 CAMARO 3- 3.42 CAMARO 1.93 (R)		CAMARO 4- 2.64 SPEED 1.75 (a) 1.34 (b) 1.00 2.55 (R)					
(AUTO)														
V-8 350CID-4V (5.7 ℓ) 1.68 (CHEVY)	THM 400 3- 2.48 SPEED 1.48 1.00 2.08 (R)		(DISCONTINUED)		CHEVROLET 4- 2.64 SPEED 1.75 (a) 1.34 (b) 1.00 2.55 (R)		CAMARO 3- 3.42 CAMARO 1.93 (R)		(DISCONTINUED)					
(AUTO)														
(MANUAL)	CORVETTE 4- 2.64 SPEED 1.75 1.34 1.00 2.55 (R)		CORVETTE 4- 2.64 SPEED 1.75 (a) 1.34 (b) 1.00 2.55 (R)		CORVETTE 4- 2.64 SPEED 1.75 (a) 1.34 (b) 1.00 2.55 (R)		CORVETTE 4- 2.64 SPEED 1.75 (a) 1.34 (b) 1.00 2.55 (R)		CORVETTE 4- 2.85 SPEED 2.02 (a) 1.35 (b) 1.00 2.85 (R)		CORVETTE 4- 2.85 SPEED 2.02 (a) 1.35 (b) 1.00 2.85 (R)			
(MANUAL)														
(AUTO)	CORVETTE 3- 2.52 SPEED 1.52 1.00 1.93 (R)		CORVETTE 3- 2.52 SPEED 1.52 1.00 1.93 (R)		CORVETTE 3- 2.52 SPEED 1.52 1.00 1.93 (R)		CORVETTE 3- 2.52 SPEED 1.52 1.00 1.93 (R)		CORVETTE 3- 2.52 SPEED 1.52 1.00 1.93 (R)		CORVETTE 3- 2.52 SPEED 1.52 1.00 1.93 (R)			
(AUTO)														

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)	MODEL YEAR																		
	1975			1976			1977			1978			1979			1980			
	ORVLINE RATIOS TRANSMISSION	AXLE	CAR MODELS	ORVLINE RATIOS TRANSMISSION	AXLE	CAR MODELS	ORVLINE RATIOS TRANSMISSION	AXLE	CAR MODELS	ORVLINE RATIOS TRANSMISSION	AXLE	CAR MODELS	ORVLINE RATIOS TRANSMISSION	AXLE	CAR MODELS	ORVLINE RATIOS TRANSMISSION	AXLE	CAR MODELS	
V-8 350CID-4V (5.7 l) L82 (CHEV) (MANUAL)	4- SPEED 1.75 1.34 1.00 2.55(R)	3.55	CORVETTE	4- SPEED 1.75 (a) 1.34 (b) 1.00 2.55(R)	3.55	CORVETTE	CHEVROLET 4- SPEED 1.75 (a) 1.34 (b) 1.00 2.55(R)	3.70	CORVETTE	4- SPEED 1.75 (a) 1.34 (b) 1.00 2.55(R)	3.70	CORVETTE							
(MANUAL)	4- SPEED 1.61 1.23 1.00 2.35(R)	3.55	CORVETTE	4- SPEED 1.61 (a) 1.23 (b) 1.00 2.35(R)	3.55	CORVETTE	CHEVROLET 4- SPEED 1.61 (a) 1.23 (b) 1.00 2.35	3.70	CORVETTE	4- SPEED 1.61 (a) 1.23 (b) 1.00 2.35(R)	3.70	CORVETTE							
(AUTO)	3- SPEED 1.48 1.08(R) 2.08(R)	3.36 3.55 (d)	CORVETTE	3- SPEED 1.48 (a) 1.00 2.00 3.55(d)	3.36 3.55 (d)	CORVETTE				3- SPEED 1.48 (a) 1.00 2.00(R)	3.55	CORVETTE							
(AUTO)	3- SPEED 1.52 (a) 1.00 1.93(R)	2.56	FIREBIRD LEMAN (f)	THM 350 3- SPEED 1.52 (a) 1.00 1.93(R)	2.41	FIREBIRD LEMAN (f)													

\* DROPPED IN 1977

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

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GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS. TYPE)	MODEL YEAR											
	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS
350CID-V6 (CORV PONTIAC) (AUTO)			THM 400 3- 2.48 SPEED 1.68 1.00 2.08(R) 2.41 GRAND PRINX		(DISCONTINUED)							
	CHEVROLET											
V-8 ** 350CID-4V (5.7 L) L76 (PONTIAC) (MANUAL)	4- 2.54 SPEED 1.80 (a) 1.44 1.00 1.34(R)		FIREBIRD 3.08		(DISCONTINUED)							
(AUTO)	3- 2.52 SPEED 1.52 1.00 1.93(R)		FIREBIRD 2.56 LEMAN (f) 2.13		THM 350 3- 2.52 SPEED 1.52 1.00 1.93(R) 2.41 FIREBIRD LEMAN (f) 2.56		(DISCONTINUED)					
(AUTO)	3- 2.48 SPEED 1.48 1.00 2.08(R)		GRAND PRINX 2.56		THM 400 3- 2.48 SPEED 1.48 (c) 1.00 2.08(R) 2.41 GRAND PRINX		(DISCONTINUED)					
V-8 ** 350CID-FI (5.7 L) L49 (CADILLAC) (AUTO)	3- 2.48 SPEED 1.48 1.00 2.07(R)		SEVILLE 2.56 3.08		THM 400 3- 2.48 SPEED 1.48 1.00 2.07(R) 2.56 SEVILLE 3.08		3- 2.48 SPEED 1.48 1.00 2.07(R) 2.56 SEVILLE 3.08					

\*\* DROPPED IN 1978  
\* NEW IN 1975

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

GENERAL MOTORS

ENGINE TYPE AND SIZE (CRANS. TYPE)	1975				1976				1977				1978				1979				1980			
	DELINE RATIOS		CAR MODELS		DELINE RATIOS		CAR MODELS		DELINE RATIOS		CAR MODELS		DELINE RATIOS		CAR MODELS		DELINE RATIOS		CAR MODELS		DELINE RATIOS		CAR MODELS	
	3-	4-	5-	6-	3-	4-	5-	6-	3-	4-	5-	6-	3-	4-	5-	6-	3-	4-	5-	6-	3-	4-	5-	6-
V-8 350 CID-4V (5.7 L) LS4 (OLDS)	3- 2.52 SPEED 1.52 1.00 1.93(R)	2.73	CUTLASS		3- 2.52 SPEED 1.52 1.00 1.93(R)	2.56 2.73 3.08 2.41	CUTLASS		3- 2.52 SPEED 1.52 1.00 1.93(R)	2.41			3- 2.52 SPEED 1.52 1.00 1.93(R)	2.41			3- 2.52 SPEED 1.52 1.00 1.93(R)	2.41			3- 2.52 SPEED 1.52 1.00 1.93(R)	2.41		
(AUTO)																								
V-8 350 CID-4V (5.7 L) LS4 (OLDS)	3- 2.48 SPEED 1.48 1.00 2.07(R)	2.73	DELTA 88		3- 2.48 SPEED 1.48 1.00 2.07(R)	2.56	DELTA 88		3- 2.48 SPEED 1.48 1.00 2.07(R)	2.56			3- 2.48 SPEED 1.48 1.00 2.07(R)	2.41			3- 2.48 SPEED 1.48 1.00 2.07(R)	2.41			3- 2.48 SPEED 1.48 1.00 2.07(R)	2.41		
(AUTO)																								
DIESEL V-8 350CID-FI (5.7 L) LF9 (OLDS)	3- 2.48 SPEED 1.48 1.00 2.07(R)	2.73	DELTA 88		3- 2.48 SPEED 1.48 1.00 2.07(R)	2.56	DELTA 88		3- 2.48 SPEED 1.48 1.00 2.07(R)	2.56			3- 2.48 SPEED 1.48 1.00 2.07(R)	2.41			3- 2.48 SPEED 1.48 1.00 2.07(R)	2.41			3- 2.48 SPEED 1.48 1.00 2.07(R)	2.41		
(AUTO)																								

\* NEW IN 1978

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)





ENGINE TYPE AND SIZE (LEANS, <del>172</del> )	1975			1976			1977			1978			1979			1980		
	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	
178 (CONT)	3- SPEED 1.52 1.00 1.93(R)	2.56	FIREBIRD	3- SPEED 2.52 1.52 1.00 1.93(R)	2.41	FIREBIRD	TRM 350 3- SPEED 2.52 1.52 1.00 (G) 1.93(R) (B) 1.93(R)	2.41	FIREBIRD PONTIAC(F) LEMAN(S) (F)	3- SPEED 2.52 1.52 (G) 1.00 (B) 1.93(R)	2.41	FIREBIRD PONTIAC(F) LEMAN(S) (F)	3- SPEED 2.52 1.52 (G) 1.00 (B) 1.93(R)	2.56	FIREBIRD PONTIAC(G)	3- SPEED 2.52 1.52 (G) 1.00 (B) 1.93(R)	2.41	FIREBIRD PONTIAC(G)
172 (PONTIAC)	3- SPEED 2.48 1.00 2.08(R)	2.56	PONTIAC(G) GRAND PRIX LEMAN(S) (F)	3- SPEED 2.48 1.00 2.08(R)	2.41	GRAND PRIX LEMAN(S) (F)	TRM 400 3- SPEED 2.48 1.00 2.08(R)	2.41	GRAND PRIX LEMAN(S) (F)	3- SPEED 2.48 1.00 (A) 1.00 (B) 2.08(R)	2.41	GRAND PRIX LEMAN(S) (F)	3- SPEED 2.48 1.00 (A) 1.00 (B) 2.08(R)	2.56	PONTIAC(G)	3- SPEED 2.48 1.00 (A) 1.00 (B) 2.08(R)	2.41	GRAND PRIX LEMAN(S) (F)
V-8* 400CID-4V (6.6L) 172 (PONTIAC)	3- SPEED 2.48 1.00 2.08(R)	2.56	DELTA 88 (G) PONTIAC (F) LEMAN(S) (G)	3- SPEED 2.48 1.00 2.08(R)	2.56	DELTA 88 (G) PONTIAC (F) LEMAN(S) (G)	BORG & BECK 4- SPEED 2.43 1.61 (G) 1.23 (B) 1.93(R) 2.35(R)	3.23	FIREBIRD	4- SPEED 2.43 1.61 (G) 1.23 (B) 1.93(R) 2.35(R)	3.42	FIREBIRD	4- SPEED 2.43 1.61 (G) 1.23 (B) 1.93(R) 2.35(R)	3.42	FIREBIRD	4- SPEED 2.43 1.61 (G) 1.23 (B) 1.93(R) 2.35(R)	3.42	FIREBIRD
172 (PONTIAC)	3- SPEED 2.48 1.00 2.08(R)	2.56	PONTIAC (F) LEMAN(S) (G)	3- SPEED 2.48 1.00 2.08(R)	2.56	PONTIAC (F) LEMAN(S) (G)	TRM 350 3- SPEED 2.52 1.52 (A) 1.00 (B) 1.93(R)	3.23	FIREBIRD	3- SPEED 2.52 1.52 (A) 1.00 (B) 1.93(R)	3.23	FIREBIRD	3- SPEED 2.52 1.52 (A) 1.00 (B) 1.93(R)	3.23	FIREBIRD	3- SPEED 2.52 1.52 (A) 1.00 (B) 1.93(R)	3.23	FIREBIRD

\*NEW IN 1977

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



ENGINE TYPE AND SIZE (GENS., CYL.)	1975			1976			1977			1978			1979			1980		
	DRIVELINE RATIOS			DRIVELINE RATIOS			DRIVELINE RATIOS			DRIVELINE RATIOS			DRIVELINE RATIOS			DRIVELINE RATIOS		
	TRANSMISSION	AXLE	CAR MODELS	TRANSMISSION	AXLE	CAR MODELS	TRANSMISSION	AXLE	CAR MODELS	TRANSMISSION	AXLE	CAR MODELS	TRANSMISSION	AXLE	CAR MODELS	TRANSMISSION	AXLE	CAR MODELS
L6D (CONT.)	(AUTO)																	
							TRM 425											
	(AUTO)																	
V-8* 425CID-4V (7.0) L33 (CADILLAC)	(AUTO)																	
							TRM 425											
	(AUTO)																	
V-8* 425CID-E.F.1. (7.0) L35 (CADILLAC)	(AUTO)																	

\* NEW IN 1977

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

REVISED: 8/1/78. AG-CTP

MODEL YEAR

GENERAL MOTORS ENGINE TYPE AND SIZE (TRANS. AXLE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE	DRIVELINE RATIOS TRANSMISSION	CAR MODELS AXLE
L35 (CONT.) (AUTO)												
V-8* 455CID-4V (7.4ℓ) LS4 (CHEVY)	3- SPEED 2.48 1.48 1.00 2.08(R)	2.73 CHEVY (G) MONTE CARLO 3.08 2.08(R)	3- SPEED 2.48 1.48 1.00 2.08(R)	TRN 400 2.73 CHEVY (G) MONTE CARLO 3.08 2.08(R)	3- SPEED 2.48 1.48 1.00 2.07(R)	TRN 400 (G) MONTE CARLO 2.73 3.08 CADILLAC	3- SPEED 2.48 1.48 1.00 2.07(R)	(H) CADILLAC 2.28 (G) 3.08				
V-8* 455CID-4V (7.4ℓ) BUICK	3- SPEED 2.52 1.52 1.00 1.93(R)	TRN 350 2.73 LE SABRE (F)	3- SPEED 2.52 1.52 1.00 1.93(R)	(DISCONTINUED)								
	3- SPEED 2.48 1.48 1.00 2.08(R)	2.93 LE SABRE (G) 2.73 ELECTRA (G) RIVIERA 2.73	3- SPEED 2.48 1.48 1.00 2.08(R)	TRN 400 2.93 LE SABRE (G) 3.23 (G) ELECTRA (G) RIVIERA 2.73								

\*DROPPED IN 1977

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

1975		1976		1977		1978		1979		1980	
DRIVE- LINE RATIOS	CAR MODELS	DRIVE- LINE RATIOS	CAR MODELS	DRIVE- LINE RATIOS	CAR MODELS	DRIVE- LINE RATIOS	CAR MODELS	DRIVE- LINE RATIOS	CAR MODELS	DRIVE- LINE RATIOS	CAR MODELS
TRANSMISSION AXLE		TRANSMISSION AXLE		TRANSMISSION AXLE		TRANSMISSION AXLE		TRANSMISSION AXLE		TRANSMISSION AXLE	
		BORG & BECK		(DISCONTINUED)							
4-		2.43									
SPEED		1.61	FIREBIRD								
		(A)									
		1.00									
		2.33 (R)									
		THI 400		(DISCONTINUED)							
3-		2.48	GRAND PRIX								
SPEED		1.00	LEMAN (F)								
		2.08 (R)	PONTIAC (F)								
		2.73									
		PONTIAC (G)									
		2.73									
		(G)									
		2.93									
		(C)									
		2.73									
		(G)									
		2.73									
		(C)									
		THI 425		(DISCONTINUED)							
3-		2.48	TORONADO								
SPEED		1.48									
		1.00									
		2.08 (R)									
		THI 400		(DISCONTINUED)							
3-		2.48	DELTA 88 (F)								
SPEED		1.48	OLDS 98								
		1.00	CUTLASS								
		2.08 (R)									
		2.73									
		(R)									
		2.73									
		(G)									

GENERAL MOTORS

NOBLE VALVE

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REVISED: 8/1/78 AG-CTP

ENGINE  
TYPE AND SIZE  
(TRANS. TYPE)

V-8  
350 D-4V  
C-4  
PONTIAC

(MANUAL)

(AUTO)

V-8  
455 D-4V  
C-4  
OLDSMOBILE

(AUTO)

(AUTO)

\*SHIPPED IN 1977

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



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GENERAL MOTORS ENGINE TYPE AND SIZE (CLASS - TYPE)	MODEL YEAR																				
	1975			1976			1977			1978			1979			1980					
	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS			
V-8* 300CID-4V (8.2L) CADILLAC																					
	3- SPEED 2.48 1.48 1.00 2.09(R)	2.73	ELDORADO	(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)		
(AUTO)																					
V-8* 500CID-4V (1*) (8.2L) CADILLAC																					
	3- SPEED 2.48 1.48 1.00 2.09(R)	3.15	CADY LIMO & AMBULANCE CADILLAC	(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)		
(AUTO)																					
*ADAPTED FROM 1977 MAY 15, 1976																					

FIGURE A-1. GENERAL MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULE, 1975-80 (CONCLUDED)



APPENDIX B  
FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

TABLE B-1. NOTES FOR FORD ENGINE-TRANSMISSION-REAR AXLE  
PRODUCT SCHEDULE

- (a) Not available in California
- (b) Not available, high altitude
- (c) California only
- (d) High altitude only
- (e) Standard in California
- (f) Variable venturi, California & high altitude only
- (g) Optional in California
- (h) Standard with station wagon
- (i) Federal only
- (W) Windsor engine
- (M) Modified Cleveland, destroked 400 CID engine
- (R) Reverse
  
- (1) The optional ratio may be used in lieu of the standard ratio where A/C is included.
- (2) FMX vs C-4 not clear that these transmissions are available for both 302 & 351 engines.  
(Interchangeable)
- (\*) Economy speed combination

FORD	ENGINE TYPE AND SIZE (TRANS. TYPE)	MODEL YEAR											
		1975		1976		1977		1978		1979		1980	
		DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE	DRIVE- SHAFT	AXLE
11-4 98CID-2V 1-62	(MANUAL)												
11-4 140CID-2V 2-11	(MANUAL)												
	(MANUAL)												

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80

FORD ENGINE TYPE AND SIZE (TRANS. TYPE)	PAGE 2 MODEL YEAR							
	1975		1976		1977		1978	
	DRIVE- LINE RATIOS TRANSMISSION	AXLE ANGLE MODELS	DRIVE- LINE RATIOS TRANSMISSION	AXLE ANGLE MODELS	DRIVE- LINE RATIOS TRANSMISSION	AXLE ANGLE MODELS	DRIVE- LINE RATIOS TRANSMISSION	AXLE ANGLE MODELS
(CONT) L4-6 160CID-2V 2.3L	3.65 1.97 1.77 1.00 3.66 (R)	PINTO BOBCAT 3.44 CAPRI II	3.65 1.97 1.37 1.00 3.66 (R)	3.1B 3.44 (OPT) 3.1DD (E,N,C)*	PINTO BOBCAT 3.44 CAPRI II (E,N,C)*	3.1B 3.65 1.97 (R)	3.1B 3.65 1.97 (R)	PINTO & BOB- CAT RANGERS (STD) (a) SEDANS (OPT)
(MANUAL)	3.40 3.55 3.37 (R)	PINTO BOBCAT RACON	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)	(DISCONTINUED)
(AUTOMATIC)	2.47 1.47 1.00 2.11 (R)	MUSTANG II PINTO BOBCAT	2.47 1.47 1.00 2.11 (R)	3.1B OPT: 3.4D (e)(1)	MUSTANG II PINTO BOBCAT	2.47 1.47 1.00 2.11 (R)	3.1B 3.1B 3.1B 3.1B (R)	MUSTANG II PINTO BOBCAT 3.0B 3.0B (1)

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80, (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975				1976				1977				1978				1979				1980			
	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS	DRIVELINE RATIOS	TRANSMISSION	AXLE	CAR MODELS
(CONV) 170-SCID-2V (AUTOMATIC)	SPEED 2.46																							
	3.55			MUSTANG II	CRUISE-O-MATIC (C-4)																			
(M-6 (6SP) 170-SCID-2V (MANUAL)	1.46																							
	3.40			PINTO																				
(MANUAL)	1.00																							
	(R)2.20																							
(MANUAL)																								
(MANUAL)																								
(MANUAL)																								
(AUTOMATIC)																								
(AUTOMATIC)																								
(AUTOMATIC)																								
(AUTOMATIC)																								

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



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MODEL YEAR

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS
(AUTO)												
V-6 (60P) 170-8CID-VV (VARIABLE VELOCITY)												
(AUTOMATIC)												
IL-6 200CID-1V (MANUAL)												
(MANUAL)												
(MANUAL)												
(AUTOMATIC)												

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

FORD ENGINE TYPE AND SIZE (TRANS. SIZE)	MODEL YEAR																		
	1975			1976			1977			1978			1979			1980			
	DRIVE- LINE RATIO	TRANSMISSION	AXLE	DRIVE- LINE RATIO	TRANSMISSION	AXLE	DRIVE- LINE RATIO	TRANSMISSION	AXLE	DRIVE- LINE RATIO	TRANSMISSION	AXLE	DRIVE- LINE RATIO	TRANSMISSION	AXLE	DRIVE- LINE RATIO	TRANSMISSION	AXLE	
(CONT)																			
IL-6 200CID-1V (AUTOMATIC)																			
IL-6 250CID-1V (MANUAL)																			
(MANUAL)																			
(AUTOMATIC)																			

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



FORD  
ENGINE  
TYPE  
(TRANS., TREE)

	1975		1976		1977		1978		1979		1980	
	DRIVE- SHAFT RATIO	CAR MODELS	DRIVE- SHAFT RATIO	CAR MODELS	DRIVE- SHAFT RATIO	CAR MODELS	DRIVE- SHAFT RATIO	CAR MODELS	DRIVE- SHAFT RATIO	CAR MODELS	DRIVE- SHAFT RATIO	CAR MODELS
V-8 302CID-2V	3.00	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00	CONTO MAVERICK MUSTANG II GRANADA MONARCH
(AUTOMATIC)	3.00 2.46 1.46 1.00 (R)2.20 OPT: 2.75(4)	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.20 OPT: 3.00 LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.46 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.46 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH
(AUTOMATIC)	3.00 2.46 1.46 1.00 (R)2.20 OPT: 2.75(4)	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.20 OPT: 3.00 LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.46 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.46 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH
(AUTOMATIC)	3.00 2.46 1.46 1.00 (R)2.20 OPT: 2.75(4)	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.20 OPT: 3.00 LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.79 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.46 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH	3.00 2.46 1.46 1.00 (R)2.19 OPT: 2.75(4) LOCKING	CONTO MAVERICK MUSTANG II GRANADA MONARCH

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)

	1975				1976				1977				1978				1979				1980								
	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO	DRIVE SHAFT RATIO
V-8 (F) ADJUSTABLE VARIABLE VELOCITY (AUTOMATIC)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING
V-8 351CID-2V (AUTOMATIC)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING	LOCKING

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)







REVISED: 8/1/78 AC-CPT

FORD ENGINE TYPE AND SIZE (TRANS., TYPE)	MODEL YEAR						1980						
	1975		1976		1977		1978		1979		1980		
	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	
V-8 460CID-4V  (AUTOMATIC)	J- SPEED 2.46 1.46 1.46 1.00 (R)2.18	2.75(4) COUGAR 3.00 FORD ELITE LINCOLN MONTGO TORINO MARK IV T-BIRD	J- SPEED 2.46 1.46 1.46 1.00 (R)2.18	C-6 COUGAR ELITE LINCOLN MARK IV MERCURY MONTGO TORINO	J- SPEED 2.46 1.46 1.46 1.00 (R)2.18	2.75(4) FORD INCL. LOCKING 3.00(4) FOR POLICE	3- SPEED 2.46 1.46 1.00 (L) (R) 2.18 POLICE 3.00 2.75 LINCOLN 2.50 MARK V	3- SPEED 2.46 1.46 1.00 (L) (R) 2.18 POLICE 3.00	2.50 FORD 2.75 MERCURY POLICE 3.00	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS

FIGURE B-1. FORD ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONCLUDED)

APPENDIX C

CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

TABLE C-1. NOTES FOR CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE

Footnotes:

- |                                    |                                 |
|------------------------------------|---------------------------------|
| (a) Not Available in California    | (g) Optional in California      |
| (b) Not Available in High Altitude | only                            |
| (c) California Only                | (h) Electronic Lean-Burn System |
| (d) High Altitude Only             | (i) Transaxle/Front-Wheel-Drive |
| (e) Standard in California         | (R) Reverse                     |
| (f) Federal Only                   |                                 |

Lock-up Torque Converter Available on Some 1978 Models of:

Aspen, Cordoba, Lebaron, Diplomat, Fury, Monaco, Volare,  
Charger S/E, Magnum XE

Included are: all Federal models except 440 CID V-8,  
all California models except 440 CID V-8 and  
225 CID IL-6,  
no high altitude models.

Ref.: W.E.U. 11/11/77 p. 4.

1976 Models Available with Lean-Burn Engines:

Chrysler 400 CID-4V, Monaco, Gran Fury

1977 Models Available/Equipped with Lean-Burn Engines:

Chrysler: 400 CID-4V, 440 CID-4V  
Royal Monaco: 400 CID-4V, 440 CID-4V  
Gran Fury: 400 CID-4V, 440 CID-4V  
Cordoba: 400 CID-4V  
Charger S/E 400 CID-4V  
Monaco: 318 CID-2V, 400 CID-4V  
Fury: 318 CID-4V, 400 CID-4V  
Volare: 360-4V  
Diplomat/LeBaron: 318-2V

1978 Models Available/Equipped with Lean-Burn Engines:

Volare/Aspen - all except 225 CID  
Lebaron - all except 225 CID and 360-4V  
Diplomat - all except 225 CID and 360-4V  
Fury - all except 225 CID and 360-4V  
Monaco - all except 225 CID and 360-4V  
Charger S/E - all except 360 CID-4V  
Chrysler - all except 360 CID-4V  
Cordoba - all except 360 CID-4V  
Magnum XE - all except 360 CID-4V

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980		
	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	DRIVELINE RATIO	CAR MODELS	
311-4 97.5C10-1V (3.597L) (MANUAL)	4-- SPEED 3.525 2.193 1.442 1.000 (R) 3.867	3.889 COLT	3.889 COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON
	3-- SPEED 2.452 1.452 1.000 (R) 2.214	3.889 COLT	3.889 COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON
311-4 97.5C10-2V (3.597L) (MANUAL)	4-- SPEED 3.525 2.193 1.442 1.000 (R) 3.867	3.889 COLT	3.889 COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON	3.525 2.193 1.442 1.000 (R) 3.867 5-- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.867	COLT ARRON
311-4 97.5C10-2V (3.597L) (AUTO)	3-- SPEED 2.452 1.452 1.000 (R) 2.214	3.889 COLT	3.889 COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON	2.452 1.452 1.000 (R) 2.214	COLT ARRON

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVE/TRANS	CAR MODELS	DRIVE/TRANS	CAR MODELS	DRIVE/TRANS	CAR MODELS	DRIVE/TRANS	CAR MODELS	DRIVE/TRANS	CAR MODELS	DRIVE/TRANS	CAR MODELS
97.5 (CONT)	5- SPEED 3.215 2.000 1.316 1.000 0.853 (R) 3.667	COLT ARROW	4.222	COLT ARROW	3.215 2.000 1.316 1.000 0.853 (R) 3.667	(4) 3.889 COLT 4.222 ARROW	3.215 2.000 1.316 1.000 0.853 (R) 3.667	4.222	ARROW CHALLENGER			
(AUTO)	3- SPEED 2.452 1.452 1.000 (R) 2.214	COLT ARROW	3.489	COLT ARROW	2.452 1.452 1.000 (R) 2.214	A-904 (4) 3.545 COLT 3.909 ARROW	2.452 1.452 1.000 (R) 2.214	3.545 3.909	ARROW SAPPHORO CHALLENGER COLT HAVON			
104.7CID-2V (1.7L) (MANUAL)												
(AUTO)												
114.4 CID-1V (1.95L) (MANUAL)												
(AUTO)												

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975			1976			1977			1978			1979			1980			
	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	
TL-4 121.7CID-70 (L-926) (MANUAL)	5-	3.360	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT
		SPEED 2.035	2.035	ARRON	2.035	2.035	ARRON	2.035	2.035	ARRON	2.035	2.035	ARRON	2.035	2.035	ARRON	2.035	2.035	ARRON
(AUTO)	3-	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON
		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856	
TL-4 155.9CID-117 (2.553) (MANUAL)	5-	3.360	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT
		SPEED 2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON
(AUTO)	3-	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON
		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856	
TL-4 155.9CID-117 (2.553) (MANUAL)	5-	3.360	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT	3.369	3.889	COLT
		SPEED 2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON	2.452	2.452	ARRON
(AUTO)	3-	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON	1.360	1.000	ARRON
		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856		1.000	0.856	

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



CHRYSLER

ENGINE TYPE AND SIZE (TRANS. TYPE)

TI-4  
155-9CID-2V  
(2-55SD)

(MANUAL)

(AUTO)

TI-6  
225CID-1V

(MANUAL)

ENGINE TYPE AND SIZE (TRANS. TYPE)	MODEL YEAR											
	1975		1976		1977		1978		1979		1980	
	DRIVE- SHAFT RATIO	AXLE RATIO	DRIVE- SHAFT RATIO	AXLE RATIO	DRIVE- SHAFT RATIO	AXLE RATIO	DRIVE- SHAFT RATIO	AXLE RATIO	DRIVE- SHAFT RATIO	AXLE RATIO	DRIVE- SHAFT RATIO	AXLE RATIO
TI-4 155-9CID-2V (2-55SD)	3- SPEED 3.08 1.70 1.00 (R) 2.90	3.21	CORONET FURY	3- SPEED 3.08 1.70 1.00 (R) 2.90	3.23 2.94 3.21	ASPEN VOLARE CHARGER FURY	3- SPEED 3.08 1.70 1.00 (R) 2.90	3.23 3.24 3.21	ASPEN VOLARE (b)	3- SPEED 3.08 1.70 1.00 (R) 2.90	3.23 3.21	VOLARE (b)
TI-6 225CID-1V	3- SPEED 2.452 1.452 1.000 (R) 2.214	A-300L	SAPPHORO CHALLENGER COLT WAGON	3- SPEED 2.452 1.452 1.000 (R) 2.214	A-300L	SAPPHORO CHALLENGER COLT WAGON	3- SPEED 2.452 1.452 1.000 (R) 2.214	3.23 3.24 3.21	ASPEN VOLARE (b)	3- SPEED 3.08 1.70 1.00 (R) 2.90	3.23 3.21	VOLARE (b)

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVE- LINE RATIO	CAR MODELS	DRIVE- LINE RATIO	CAR MODELS	DRIVE- LINE RATIO	CAR MODELS	DRIVE- LINE RATIO	CAR MODELS	DRIVE- LINE RATIO	CAR MODELS	DRIVE- LINE RATIO	CAR MODELS
225 (CONT) (MANUAL)	3- SPEED 2.45 1.45 1.00 (R) 2.20		4- SPEED 3.09 1.67 1.00 (R) 3.00	A-390 3.23 ASPEN 3.21 VOLARE (c) 2.94 VOLARE (c)	3- SPEED 2.45 1.45 1.00 (R) 2.22	2.76 ASPEN (c) 2.94 VALIANT (c) 3.21 VALIANT (c) 3.23 VALIANT (c)	4- SPEED 3.09 1.67 1.00 (R) 3.00	3.23 ASPEN 3.21 VOLARE (b) 2.94 VOLARE (b)				
(AUTO)	3- SPEED 2.45 1.45 1.00 (R) 2.20		3- SPEED 2.45 1.45 1.00 (R) 2.22	A-904 3.23 ASPEN 3.21 VOLARE (c) 2.94 VOLARE (c)	3- SPEED 2.45 1.45 1.00 (R) 2.22	2.76 ASPEN (c) 2.94 VALIANT (c) 3.21 VALIANT (c) 3.23 VALIANT (c)	3- SPEED 2.45 1.45 1.00 (R) 2.22	2.71 ASPEN (b) 2.76 VOLARE (c, d) 3.21 ASPEN (c, d) 3.23 ASPEN (c, d) LEBARON (c, d) DIPLOMAT (c, d)				

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)



CHRYSLER

ENGINE  
TYPE AND SIZE  
(TRANS. TYPE)

318 (CONT) (ANNUAL)

1975	1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS
4- SPEED 3.09 1.92 1.40 1.00 (R) 3.00	2.45 DART 2.94 VALTANT 3.21	2.94 ASPEN (F) 3.21 VOLARE (F) DART (F) VALTANT (F)	4- SPEED 3.09 1.92 1.40 1.00 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)		
4- SPEED 2.45 1.45 1.00 (R) 2.20	2.71 CORONET 2.45 CHARGER 2.45 CHEROKEE 3.21 CRABTREE NONACO	2.94 ASPEN (F) 3.21 VOLARE (F) DART (F) VALTANT (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)		
4- SPEED 2.45 1.45 1.00 (R) 2.00	2.71 DART 2.45 VALTANT	2.94 ASPEN (F) 3.21 VOLARE (F) DART (F) VALTANT (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)	4- SPEED 3.09 1.67 1.00 0.71 (R) 3.00	2.94 ASPEN (F) 3.21 VOLARE (F)		

(AUTO)

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVE/LINE RATIOS	CAR MODELS	DRIVE/LINE RATIOS	CAR MODELS	DRIVE/LINE RATIOS	CAR MODELS	DRIVE/LINE RATIOS	CAR MODELS	DRIVE/LINE RATIOS	CAR MODELS	DRIVE/LINE RATIOS	CAR MODELS
318 (CONT) (AUTO)												
(AUTO)												
(AUTO)												
V-8 318CID-4V (AUTO)												

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)







CHRYSLER  
ENGINE  
TYPE AND SIZE  
(TRANS. TYPE)

360 (CONT)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS
360 (CONT)	3- SPEED	(a) 2.45 1.45 1.00 (R) 2.20	TORQUE FLITE (a) CORONET (a) CHARGER S/E (a) CHRYSLER (a) CORDOBA (a) FURY GRAN FURY MONACO	3- SPEED	2.45 1.45 1.00 (R) 2.22	FURY (c)	3- SPEED	2.45 1.45 1.00 (R) 2.22	MONACO (c) FURY (c)	3- SPEED	2.45 1.45 1.00 (R) 2.22	ASPHEN (b)(s) VOLARE (b)(s)
	(AUTO)			A-904-LA	2.71 2.45 1.45 1.00 3.21	FURY (c)	3- SPEED	2.45 1.45 1.00 (R) 2.22	MONACO (c) FURY (c) ASPHEN VOLARE (h)	3- SPEED	2.45 1.45 1.00 (R) 2.22	ASPHEN (d) VOLARE (d) OPELOHAT (d) FURY (d) MONACO (d) VOLARE
(AUTO)					A-998	ROYAL (c,d) MONACO (c,d) GRAN FURY	3- SPEED	2.45 1.45 1.00 (R) 2.22	ROYAL (c,d) MONACO (c,d) GRAN FURY	(DISCONTINUED)		
(AUTO)					A-999	CORDOBA (c) CHARGER S/E (c)	3- SPEED	2.45 1.45 1.00 (R) 2.22	CORDOBA (c) CHARGER S/E (c)	3- SPEED	2.45 1.45 1.00 (R) 2.22	CHARGER S/E (d) CORDOBA (d) MAGNUM XE (d)
T-8 400CID-2V (AUTO)						CORDOBA (e) MAGNUM XE (e)	3- SPEED	2.45 1.45 1.00 (R) 2.22	CHARGER S/E (e) CORDOBA (e) MAGNUM XE (e)	3- SPEED	2.45 1.45 1.00 (R) 2.22	CHARGER S/E (e) CORDOBA (e) MAGNUM XE (e)

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

CHRYSLER ENGINE TYPE AND SIZE (TRANS., TYPE)	1975			1976			1977			1978			1979			1980				
	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS	DRIVE- LINE RATIOS	AXLE	CAR MODELS		
400 (CONT) (AUTO)				A-722 SPEED 2.45 1.45 1.00 (R) 2.22 (E) 2.71 CHRYSLER CORDOBA CHARGER SE CORONET / CHARGER MONACO FURY GRAN FURY	A-722 SPEED 2.45 1.45 1.00 (R) 2.22 (E) 2.71 CHRYSLER CORDOBA CHARGER SE CORONET / CHARGER MONACO FURY GRAN FURY															
							A-723 SPEED 2.45 1.45 1.00 (R) 2.22 (E) 2.71 MONACO (h)(E) FURY (h)(E)	A-723 SPEED 2.45 1.45 1.00 (R) 2.22 (E) 2.71 MONACO (h)(E) FURY (h)(E)												
								A-998 SPEED 2.45 1.45 1.00 (R) 2.22 (E) 2.71 ROYAL / MONACO (E) GRAN FURY (E)	A-998 SPEED 2.45 1.45 1.00 (R) 2.22 (E) 2.71 ROYAL / MONACO (E) GRAN FURY (E)											
V-8 400CID-4V (AUTO)	TORQUE FLITE SPEED 2.45 1.45 1.00 (R) 2.20		CORONET CHARGER SE CHRYSLER CORDOBA FURY GRAN FURY MONACO																	

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

REVISED: 8/1/78 AC-CTP

CHASSIS ENGINE TYPE AND SIZE (TRANS. TYPE)	MODEL YEAR																		
	1975			1976			1977			1978			1979			1980			
	DRIVE- LINE RATIOS	CAR MODELS	AXLE	DRIVE- LINE RATIOS	CAR MODELS	AXLE	DRIVE- LINE RATIOS	CAR MODELS	AXLE	DRIVE- LINE RATIOS	CAR MODELS	AXLE	DRIVE- LINE RATIOS	CAR MODELS	AXLE	DRIVE- LINE RATIOS	CAR MODELS	AXLE	
300 (CONT) (AUTO)				A-727 SPEED 2.45 1.45 1.00 (R) 2.22	CHRYSLER (b) CORODBA (c) CHARGER (c) CORONET/ MONACO (h) GRAN FURY (h)	2.71 2.45 3.21	2.45 1.45 1.00 (R) 2.22	2.71 2.45 3.21	CHRYSLER CORODBA CHARGER S/E ROYALTY MONACO GRAN FURY	(E) (E) (E) (E)	2.71 2.45 3.21	2.45 1.45 1.00 (R) 2.22	(E) (E) (E)	CHRYSLER FURY MAG. MONACO MAG.					
NEW 440-CJ-D-A (AUTO)				(DISCONTINUED)	CHRYSLER (f) CORODBA (f) CHARGER S/E CORONET/ CHARGER FURY (E)	3.21	2.45 1.45 1.00 (R) 2.22	2.71 2.45 3.21	CHRYSLER CORODBA CHARGER S/E CORONET/ CHARGER FURY	(E) (E) (E)	2.71 2.45 3.21	2.45 1.45 1.00 (R) 2.22	(E) (E) (E)	CHRYSLER CORODBA MAGNUM XE MONACO					
(AUTO)					CHRYSLER (g) IMPERIAL GRAN FURY MONACO	2.71 3.21	2.45 1.45 1.00 (R) 2.22	2.71 2.45 3.21	CHRYSLER MONACO GRAN FURY ROYALTY MONACO	(g) (g) (g)	2.71 2.45 3.21	2.45 1.45 1.00 (R) 2.22	(b) (g) (g)	CHRYSLER (h)					
(AUTO)						A-727 SPEED 2.45 1.45 1.00 (R) 2.22	2.45 1.45 1.00 (R) 2.22	2.71 2.45 3.21	CHRYSLER MONACO GRAN FURY ROYALTY MONACO	A-998 SPEED 2.45 1.45 1.00 (R) 2.22	2.71 2.45 3.21	2.45 1.45 1.00 (R) 2.22	(DISCONTINUED)						

FIGURE C-1. CHRYSLER ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONCLUDED)

APPENDIX D  
AMERICAN MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULE

TABLE D-1. NOTES FOR AMERICAN MOTORS ENGINE-TRANSMISSION-REAR  
AXLE PRODUCT SCHEDULES

- (a) Not available in California
- (b) Not available, high altitude
- (c) California only
- (d) High altitude only
- (e) Standard in California
- (f) Canada only
- (g) Optional in California
- (h) Only ratio available for sportabout in California
- (i) A.I. 2/1/77 p. 14.
- (j) Chrysler
- (k) W.E.U. 5/29/77 p. 6
- (l) Dropped V-8, W.A.R. 3/1/76
- (m) Porsche 4 cylinder transaxle 924 engine,  
W.E.U. 5/27/77
- (n) W.A.R. 4/25/77 p. 131
- (o) W.A.R. 8/11/75 p. 253
- (p) W.A.R. 7/21/75 p. 220
- (q) W.E.U. 1/21/77 p. 5. (assumption)
- (R) Reverse
- (s) 49 States (federal) only

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975						1976						1977						1978						1979						1980									
	DRIVE SHAFT		TRANSMISSION		AXLE		DRIVE SHAFT		TRANSMISSION		AXLE		DRIVE SHAFT		TRANSMISSION		AXLE		DRIVE SHAFT		TRANSMISSION		AXLE		DRIVE SHAFT		TRANSMISSION		AXLE		DRIVE SHAFT		TRANSMISSION		AXLE					
IL-4 232CID-2V (VP-RDDI) (MANUAL)	3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN	
	Spd		1.744		3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER			
IL-6 232CID-1V (MANUAL)	4-		2.990		2.73		GREMLIN		4-		2.990		2.73		GREMLIN		4-		2.990		2.73		GREMLIN		4-		2.990		2.73		GREMLIN		4-		2.990		2.73		GREMLIN	
	Spd		1.750		3.08		NORNET PACER		1.750 1.000 (R) 3.170		3.08 3.08		NORNET PACER		1.750 1.000 (R) 3.170		3.08 3.08		NORNET PACER		1.750 1.000 (R) 3.170		3.08 3.08		NORNET PACER		1.750 1.000 (R) 3.170		3.08 3.08		NORNET PACER		1.750 1.000 (R) 3.170		3.08 3.08		NORNET PACER			
(AUTO)	3-		2.455		3.31		GREMLIN		3-		2.455		3.31		GREMLIN		3-		2.455		3.31		GREMLIN		3-		2.455		3.31		GREMLIN		3-		2.455		3.31		GREMLIN	
	Spd		1.45		1.00		(R) 2.20		2.455 1.45 1.00 (R) 2.20		3.31 3.31		GREMLIN		2.455 1.45 1.00 (R) 2.20		3.31 3.31		GREMLIN		2.455 1.45 1.00 (R) 2.20		3.31 3.31		GREMLIN		2.455 1.45 1.00 (R) 2.20		3.31 3.31		GREMLIN		2.455 1.45 1.00 (R) 2.20		3.31 3.31		GREMLIN			
(MANUAL)	3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN		3-		3.100		2.73		GREMLIN	
	Spd		1.744		3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER		1.744 1.000 (R) 2.636		3.08 3.08		NORNET PACER			

FIGURE D-1. AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80



MODEL YEAR

AMC

ENGINE TYPE AND SIZE (TRANS. TYPE)

232 (CONT)

(MANUAL)

(MANUAL)

(MANUAL)

(MANUAL)

(MANUAL)

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS	DRIVELINE RATIOS	CAR MODELS
	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE	TRANSMISSION	AXLE
232 (CONT)												
(MANUAL)					(DISCONTINUED)							
			3- Spd 2.99	LAYCOCK O.D.	2.73 GREMLIN							
					3.08 (c) GREMLIN							
					1.75 HORNET							
					2.73 PACER							
					3.08 (R) 3.17							
(MANUAL)			3- Spd 2.99	TREBEC T-130	2.73 GREMLIN							
					3.08 (c) GREMLIN							
					1.75 HORNET							
					2.73 PACER							
					2.08 (R) 3.17							
(MANUAL)			4- Spd 3.50	MT-YEAR INTRO '76	2.73 GREMLIN							
					(a) GREMLIN							
					2.53 (d) GREMLIN							
					3.08 (d) GREMLIN							
					1.43 (d) HORNET							
					1.00 (R) 3.39							
					2.73 PACER							
					2.53 (d) PACER							
					3.08 (d) PACER							
					2.73 (a) GREMLIN							
					2.21 (d) GREMLIN							
					1.43 (d) HORNET							
					1.00 (R) 3.39							
					2.73 PACER							
					2.53 (d) PACER							
					3.08 (d) PACER							
					2.73 (a) GREMLIN							
					2.73 (d) GREMLIN							
					3.08 (d) HORNET							
					1.75 (a) HORNET							
					1.00 (a) PACER							
					2.73 (a) PACER							
					2.53 (d) PACER							
					3.08 (d) PACER							
					2.73 (a) GREMLIN							
					2.73 (d) GREMLIN							
					3.08 (d) HORNET							
					1.75 (a) HORNET							
					1.00 (a) PACER							
					2.73 (a) PACER							
					2.53 (d) PACER							
					3.08 (d) PACER							
					2.73 (a) GREMLIN							
					2.73 (d) GREMLIN							
					3.08 (d) HORNET							
					1.75 (a) HORNET							
					1.00 (a) PACER							
					2.73 (a) PACER							
					2.53 (d) PACER							
					3.08 (d) PACER							
					2.73 (a) GREMLIN							
					2.73 (d) GREMLIN							
					3.08 (d) HORNET							
					1.75 (a) HORNET							
					1.00 (a) PACER							
					2.73 (a) PACER							
					2.53 (d) PACER							
					3.08 (d) PACER							
					2.73 (a) GREMLIN							
					2.73 (d) GREMLIN							
					3.08 (d) HORNET							
					1.75 (a) HORNET							
					1.00 (a) PACER							
					2.73 (a) PACER							
					2.53 (d) PACER							
					3.08 (d) PACER							

FIGURE D-1. AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

AMC

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975		1976		1977		1978		1979		1980	
	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVELINE RATIOS TRANSMISSION AXLE	CAR MODELS
232 (CONT) (AUTO)	3- Spd 2.45 1.45 1.00 (R) 2.20	GREMLIN HORNET PACER	TORQUE-COMMAND (J) 3- Spd 2.45 1.45 1.00 (R) 2.20		GREMLIN HORNET PACER	3- Spd 2.45 1.45 1.00 (R) 2.20	GREMLIN HORNET PACER	3- Spd 2.45 1.45 1.00 (R) 2.20	GREMLIN CONCORD PACER CONCORD WAGON			
	LAYCOCK O.D.		(DISCONTINUED)									
1L-6 258CID-1V (MANUAL)	4- Spd 2.990 1.750 1.000 1.75 3.170	GREMLIN HORNET PACER	(DISCONTINUED)									
	LAYCOCK O.D.		(DISCONTINUED)									
(MANUAL)	3- Spd 3.99 1.75 1.00 (R) 3.17	GREMLIN HORNET	TREMEC T-150	(DISCONTINUED)								
	LAYCOCK O.D.		(DISCONTINUED)									
(MANUAL)	3- Spd 3.100 1.744 1.000 (R) 2.636	GREMLIN HORNET PACER MATADOR	WARNER GEAR T-14	3- Spd 3.100 1.744 1.000 (R) 2.636	GREMLIN HORNET PACER MATADOR	3- Spd 3.100 1.744 1.000 (R) 2.636	GREMLIN HORNET PACER MATADOR	3- Spd 3.50 2.21 1.43 1.00 (R) 3.39	GREMLIN CONCORD CONCORD PACER			
	LAYCOCK O.D.		(DISCONTINUED)									
(MANUAL)	3- Spd 2.99 1.75 1.00 (R) 3.17	GREMLIN HORNET PACER	LAYCOCK O.D.	3- Spd 2.99 1.75 1.00 (R) 3.17	GREMLIN HORNET PACER	3- Spd 2.99 1.75 1.00 (R) 3.17	GREMLIN HORNET PACER	3- Spd 2.99 1.75 1.00 (R) 3.17	GREMLIN HORNET PACER			

FIGURE D-1. AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)





MODEL YEAR

AMC

ENGINE TYPE AND SIZE (TRANS. TYPE)	1975			1976			1977			1978			1979			1980		
	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE	DRIVELINE RATIOS	CAR MODELS	AXLE
V-8 304CID-2V (MANUAL)	3- Spd 2.99 1.75 1.00 (R) 3.170	GREMLIN 3.15 HORNET 3.54		(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)			(DISCONTINUED)		
				TREMEC T-150			TREMEC T-150			TREMEC T-150			TREMEC T-150			TREMEC T-150		
V-8 360CID-2V (AUTO)	3- Spd 2.45 1.45 1.00 (R) 2.20	GREMLIN 3.15 HORNET 3.54		TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)		
				TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)		
V-8 360CID-2V (AUTO)	3- Spd 2.45 1.45 1.00 (R) 2.20	GREMLIN 3.15 HORNET 3.54		TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)		
				TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)			TORQUE-COMMAND (1)		

FIGURE D-1. AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONTINUED)

ENGINE TYPE AND SIZE (TRANS., TYPE)	MODEL YEAR											
	1975		1976		1977		1978		1979		1980	
	DRIVE- LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE- LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE- LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE- LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE- LINE RATIOS TRANSMISSION AXLE	CAR MODELS	DRIVE- LINE RATIOS TRANSMISSION AXLE	CAR MODELS
V-8 360CID-4V (AUTO)	A3- 2.45 1.65 1.00 (R) 2.20	3.15 MATADOR 3.34	A3- 2.45 1.65 1.00 (R) 2.20	MATADOR	(DISCONTINUED)		(DISCONTINUED)		(DISCONTINUED)		(DISCONTINUED)	
	A3- 2.45 1.65 1.00 (R) 2.20	3.15 MATADOR	A3- 2.45 1.65 1.00 (R) 2.20	MATADOR	(DISCONTINUED)		(DISCONTINUED)		(DISCONTINUED)		(DISCONTINUED)	

V-8 360CID-4V (AUTO)

V-8 401CID-4V (AUTO)

FIGURE D-1. AMERICAN MOTORS ENGINE-TRANSMISSION-REAR AXLE PRODUCT SCHEDULE, 1975-80 (CONCLUDED)



APPENDIX E  
REPORT OF NEW TECHNOLOGY

After a thorough review of the work performed under this contract, no new innovations, discoveries, improvements, or inventions were made or patents submitted.

The program did result in a better understanding of the automotive industry and its capacity to meet fuel economy goals due to the development of Product Schedules of Engine/Driveline Combinations for the domestic auto manufacturers.

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